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THESIS

**THE MEDIUM-WEIGHT BRIGADE STRUCTURE AND THE
TRANSFORMATION OF THE U.S. ARMY AND THE ARMY
OF UKRAINE**

by

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March 2001

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THE TRANSFORMATION OF THE U.S. ARMY AND
THE ARMY OF UKRAINE**

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Submitted in partial fulfillment of the
requirements for the degree of

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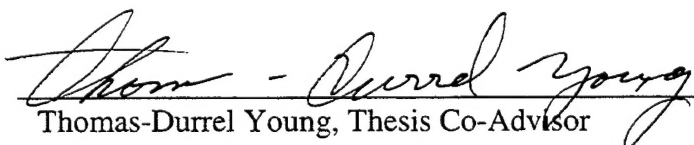
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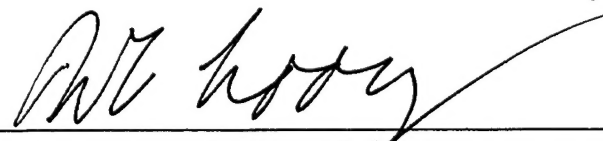
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ABSTRACT

The U.S. Army has faced many formidable decisions on how best to transform. The fundamental changes in the strategic environment after the Cold War, crucial advances in technology and military doctrine related to the Gulf War and permanent involvement in peacekeeping/peacemaking operations around the world have led to a more flexible and lethal force structure. An army should maintain the capability for conducting various military operations from small-scale contingencies to major theaters of war. Therefore, based on major changes in the strategic environment—a dismantled Warsaw Pact, increasing asymmetrical threats, budget constraints along with frequent involvement in contingency operations—the U.S. Army once more confronts transformation and reorganization.

This thesis focuses on the current transformation of the U.S. Army to examine the history of reorganizing the U.S. Army along with the dynamics of reforming the Ukrainian Army. This thesis explores why a “medium-weight brigade-size” force structure became the key feature of the U.S. Army’s transformation strategy for forces of the 21st century namely the “Objective Forces.” The main intention of this thesis is to reach conclusions about how the U.S. Army’s transformation experience can be applied to the current process of developing the Army of Ukraine.

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EXECUTIVE SUMMARY

When answering questions that have been used to frame this thesis, it is necessary to remember that while periods of peace should be respected, peace is not a permanent condition in world affairs. Recent events suggest that the time and opportunity to prepare for future conflicts may not last as long as many had hoped a few years ago. Even small nations can no longer be prevented from building total war capacity—whether nuclear or conventional. What is worse, new technologies make it possible even for small groups of perpetrators to inflict ever more chaos and dangers for nations around the world. The termination of the Cold War was marked by new calls for international safety, threats which include the increased distribution of the technology of producing weapons of mass destruction and systems of their delivery, clandestine migration, and narcotic trafficking, political, and religious extremism. All together, these factors are capable, under certain conditions, of requiring military counter-measures to counter threats to the national security of the United States and to Ukraine as well.

As a matter of fact, the U.S. Army has undergone at least five major reorganizations since the end of World War II. For several decades up to the Gulf War, the U.S. Army focused on rebuilding its forces and adjusting doctrine for conventional war, especially the defense of Western Europe against a possible attack by Warsaw Pact forces. The collapse of the Soviet Union and the apparent end of the Cold War presented threats that were more ambiguous and regionally focused and brought significant changes to the world and the U.S. Army.

However, the U.S. Army remained configured according to its Cold War structure: either very heavy armored and mechanized units armed with large numbers of heavy tracked vehicles or very light infantry-type units that were primarily foot mobile. In fact, the improvements in tactical mobility of the U.S. Army came at the expense of its strategic mobility. The U.S. Army became progressively heavier and more difficult to deploy.

Moreover, the Gulf War exposed several features of the U.S. Army's light-heavy force structure. The most significant among them was the absence of medium-weight force structure, which would be able to combine the excellent strategic mobility, rapid deployability of the light-infantry divisions, and overwhelming operational mobility, lethality and survivability of the heavy-armored force.

The experience earned from the Gulf War and from the recent peacekeeping and peacemaking operations in the Balkans reaffirmed that the U.S. Army has lacked the medium forces that combine a degree of mobility, firepower, and protection greater than the generally foot-mobile light forces, yet are less strategically and operationally cumbersome than the heavy armored and mechanized units. Therefore, the medium-weight brigade-size unit has been realized as just the right size to combine arms (armor, infantry, artillery, engineers) due to new technological advantages, which impose the brigade's lethality and survivability, while also overcoming the deployability shortcomings of the U.S. Army divisions.

The next point is that the U.S. Army, with strong support from the Congress and President G.W. Bush's administration, should take advantage of the current favorable conditions for success:

- Relatively peaceful world events;
- Unrivaled economic prosperity;
- Overwhelming technological progress.

Overall, this thesis examines the idea that in order to become more deployable and maintain lethality, the U.S. Army has fielded a prototype medium-weight brigade-size force that will use off-the-shelf systems, and initiate the development of concepts, organizational design, and training for the future of the U.S. Army called "Objective Forces." Fortunately, the U.S. Army has time to deal with this issue.

Analyzing the necessity of the Ukrainian Army's reformation, which also focuses on moving from the current large division-based structure to the medium-weight brigade-size Army, this thesis highlights several key elements from the two-year experience of the U.S. Army Transformation Strategy. This strategy should be studied and employed as a useful guide for reforming the Army of Ukraine.

Despite some large economic and technological differences between the U.S. Army and the Army of Ukraine and the system of conscription, several points of the U.S. Army transformation strategy would be suitable for developing the Ukrainian rapid reaction forces based on a brigade-size force structure. First of these is a common strategy between the political and military leadership. Second, a multi-stage approach is necessary through the entire process of transforming. Third, some key elements from the organizational structure of the Initial Brigade Combat Team (IBCT), such as a Recon, Surveillance, and Target Acquisition Squadron (RSTA) will be advisable for Ukrainian medium-weight combined arms brigades.

Finally, special attention should be given to the IBCT's Operational Concept that has been crafted with the specific goal of performing military operations in urban terrain and combat capabilities across the entire spectrum of conflicts. Above all, two recommendations should be made, which will be effective for the further development of the Army of Ukraine:

- First, the Ground Forces should have combat-ready formations and units at a level sufficient to fight a local war. The basic principle of battle actions of such an armed force is inflicting maximum damage to the opponent while receiving minimal losses for one's forces. In order to enhance the combat readiness and operational effectiveness of the troops, it is advisable, in manpower acquisition, to shift to the contract basis and to the modern, mobile, deployable combat structure of the Army based on medium-weight brigade-size units.
- Second, headquarters and troops should be equally prepared for both local wars and large-scale wars. In personnel training, it is essential to give a higher priority to developing reconnaissance and intelligence gathering and terrain orientation skills, ensuring an effective use of all types of available weapon systems and enhancing survivability in combat.

Furthermore, for Ukraine, the current and painful lack of funds should not simply break down the natural tendency of its Army to develop itself. Therefore, one of the lessons from the U.S. Army's experience is really crucial for successfully reforming the Army of Ukraine. This point is that the Ukrainian military must adjust its policy to

establish productive relationships with all branches of the state power, emphasizing public support as well as the support of legislative and executive powers. Hence, the critical point of reforming the Army of Ukraine in the light of democratic transformations is the issue of civilian control over the military and the relationship between political and military leaders.

Similar to the U.S. Army, the Army of Ukraine is enjoying a period of peaceful world events in which it can transform itself into a new Army based on modern doctrine and force structure, where medium-weight brigades will be the key element, the “backbone” of the Ground Forces of Ukraine. As a matter of fact, the medium-weight brigade solution will allow the Army of Ukraine to begin the transformation process to a full spectrum force better able to deal with various types of military operations and to bring the Army of Ukraine to modern standards of Western armies where the U.S. Army plays the dominant role. Notably, the decision to move toward the medium-weight air-mobile concept would put the Army of Ukraine firmly on the path toward a more operationally agile force the of 21st century without calling for either technological or budgetary magic.

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I. INTRODUCTION

*The art of war is of vital importance to the state. It is a matter of life and death,
hence it is a subject of enquiry, which can on no account be neglected.¹*

~ Sun Tzu.

Warfare occupies a special place in the chain of the most important, momentous events in the world. It was estimated that during five and a half millennia on earth there were approximately 15,000 wars and armed conflicts in which more than 3.5 billion people died. Throughout human history, people have lived in peace for only 292 years, for less than one week for every 100 years. Additionally, in the past 50 years, nearly 260 local wars and armed conflicts broke out.² Even worst, the 20th century has been marked by two devastating world wars. The tragic paradox of our modern history is that the evolution of human civilization could not preclude war as a means of resolving interstate, religious, ethnic, or class conflicts. And although the world community has so far managed to prevent World War III, as well as the "War with the Third World," resolving conflicts through the use of armed force remains a distinguishing feature of our era. History teaches us that while peaceful times should be cherished, peace is not a permanent condition in world affairs.³ Unfortunately, recent events suggest that the time and opportunity to prepare for future conflicts may not be as long as many had hoped five

¹ Sun Tzu, *The Art Of War*, Translated by Lionel Giles, The Department of Oriental Printed Books and MSS. in the British Museum, First Published in 1910, <http://www.kimsoft.com/polwar.htm>

² V. Vakhrushev, "Local Wars and Armed Conflicts: Impact on the Military Art," *Military Thought*, 01.08.1999, MTR-No.004, <http://news.mosinfo.ru/news/mth/>

³ Douglas A. Macgregor, *Breaking Phalanx: A New Design for Landpower in the 21st Century*, The Center for Strategic and International Studies, 1997, p.6.

years ago. Even small nations can no longer be prevented from building a total war capacity—whether nuclear or conventional.⁴

As a matter of fact, in the century that has seen the bloodiest conflicts in human history, there are signs that the basic nature of war is changing. Warfare's traditional associations with nationalism and patriotism are melting away, and the small wars of the 21st century, fought by mixed bands of looters, ideologues and mercenaries in the service of shadowy masters, have appeared from the history of the Middle Ages. Such warfare by irregular armies is now more the rule than the exception, notes military historian Martin van Creveld, "In today's world, the main threat to many states ... no longer comes from other states. Instead, it comes from small groups and other organizations which are not states."⁵

The main purpose of my thesis is to examine the history of reorganizing the U.S. Army by focusing on the most recent changes in the U.S. Army, specifically the decision to transform itself into a "medium-weight brigade-size" force structure, which is capable of operating across the full spectrum of military tasks. My second purpose is to reach some conclusions about how one can apply this brigade-size force structure to the current process of developing the Ukrainian Army. The critical question to be answered is:

- How does the military reform relate to the external dimensions of the strategic environment as well as to the internal policy in the case of reforming the U.S. Army and the Army of Ukraine?

⁴ Jeff Erlich and Theresa Hitchens, "Counterproliferation Efforts Await Requirement Review," *Defense News*, 11.6-12.1995, p.6.

⁵ M.E. Ahrari, "The Future Face of Battle Civilization," *Civilization*, 04.01.97, <http://www.britannica.com>

Moreover, I will consider the challenges of reforming the U.S. Army and the Army of Ukraine in the recent changes in the strategic environment. Additionally, I will analyze the degree to which the U.S. Army's participation in the Gulf War (1990—1991) and in the peacekeeping/peacemaking (1990—2001) operations created a "New Vision" of the U.S. Army. Finally, I will discuss the driving forces and trends developing of the Ukrainian Army in the post-Soviet era.

Considering the worldwide process of reforming an army's structure, many nations, based on their previous experience, are attempting to make their armies more rapidly deployable, lethal, survivable, self-sustainable, and all this within budget constraints. In fact, with the increasingly high-tech nature of combat, small, versatile, well-equipped forces have the advantage over cumbersome conventional armies. New technologies make it possible even for small groups of perpetrators to inflict ever more chaos and danger for nations around the world. In the face of this new threat, the world's most advanced armed forces are almost completely useless and have almost always lost. That is because their weapons and intelligence systems are designed to combat numerous, well-organized foes.⁶

With this in mind, the most dangerous future foes for the U.S, its allies and other countries called "newly-emerging democracies" will be terrorist operatives and guerrilla fighters rather than regular full-prepared and equipped national armies. However, military planners are still headed for a rude awakening if they continue to design super-powerful weapons for waging super-sophisticated wars against super-sophisticated opponents who

⁶ *A National Security Strategy for a New Century*, The White House, Washington D.C., 12.1999, <http://www.fas.org/man/docs/nssrpref-1299.htm>

are nowhere in sight. Instead, they should be preparing for a new sort of approaching war.⁷

The necessity of reorganizing of the U.S. Army as one of the components of the Ground Forces of the United States has appeared because of global changes in the arrangement of power, which has taken place worldwide during the last few decades. Since the end of the Cold War, the Department of Defense of the United States has undergone several reviews of its programs, policies, weapons and missions. In fact, the post-Cold War military strategy was designed to fight, nearly simultaneously, two major regional wars while remaining able to cope with smaller military emergencies. Therefore, those reviews determined that the military should continue to look as it always had, although somewhat smaller.⁸ However, the missions of the American military have changed dramatically since the end of the Cold War. Peacekeeping and humanitarian missions (where the U.S. Army's ability to conduct lengthy and broad-scale operations through generously manned land forces is unnecessary) have now become the norm. The spectrum of operations runs from Stability and Support Operations (SASO) at the bottom through Small Scale Contingencies (SSC) up to Major Theater War (MTW). The U.S. Army has trained and ready forces to fight a MTW. What was found in the SSC operations is that because the U.S. Army does not have forces optimized for these scenarios it has to put an ad hoc force together under time constraints.⁹

⁷ Hans A. Binnendijk and Patrick Clawson, *The Strategic Assessment 1997, Flashpoints and Force Structure*, Washington D.C.: Institute for National Strategic Studies, National Defense University, <http://www.ndu.edu/inss/sa98/sa98cont.html>

⁸ Amy Mcauliffe, *Technology: Changing the Way the Army Does Business, Military & Aerospace Electronics*, 02.1996, p.24.

⁹ Gen. Eric K. Shinseki Chief of Staff, U.S. Army, "The Army Transformation: A Historic Opportunity," *Army Magazine*, http://www.ansa.org/armyzine/shinseki_sr_00.html

The U.S. Army's requirement therefore has appeared to be more strategically responsive and capable of meeting the SSC's needs without compromising its MTW's capability. Also, the necessity of reorganizing the U.S. Army has come into view because of the rapid development of military technologies. The explanation of this technologic development can be represented as follows:

- Lethality and the range of modern arms will increase rapidly;
- The intended capability to pass, accumulate and process greater amounts of changing data as well as to establish and maintain communications at tremendous distances.
- At the same time, the necessity for increasing the maneuverability and mobility of combat units in addition to increased combat requirements at the strategic and operational levels of control.¹⁰

Tracing the evolution of the divisional structure of the U.S. Army, we will see that the overall strength of American divisions has changed constantly. For instance, during World War II American divisions of three brigades were composed of three regiments each. In fact, this structure was more maneuverable and simple to control. Nevertheless, even that division did not have all the needed units for conducting full-scale operations and, as a rule, was strengthened by additional tank, anti-tank, reconnaissance battalions and anti-aircraft batteries.

During the Korean War (1950-1953), the overall strength of a reinforced division reached the point of 13,500 personnel. That division consisted of three regiment-size

¹⁰ Sergey Onishyk, "America Moves toward the Brigade Army: The Transformation of the Ground Forces of the U.S. is Real; However Some Deficiencies Exist," *Nezavisimay Gaset*, No 28 (201), 08.04.2000, http://www.ng.ru/file://C:temp\1_brigada.html.html

operational groups. Each of them included a tank battalion, an artillery battalion, an engineer company, a reconnaissance company and supporting units.¹¹

An American PENTOMIC division in the 1960s was intended for combat operations under the conditions of using weapons of mass destruction. As a result, this division (8,600 personnel) was divided into five battle groups.¹² However, it became obvious that for conducting combat operations with conventional weapons this division structure was inadequate. In 1961, the U.S. Army dropped the PENTANA organization in favor of the concept titled, "Reorganization Objective Army Divisions" (ROAD).

The ROAD division (about 13,512 personnel) consisted of brigade task forces that were supposed to be flexible enough to fight in any environment, nuclear or non-nuclear, and to have a plausible chance of defending Western Europe without resort to tactical nuclear weapons.¹³

In 1978, the Department of the U.S. Army launched an initiative called "Division 86" and in July 1979, formally adopted this concept. Even though the Division 86's concept seemed similar to the ROAD division, the heavy division totaled about 20,000 personnel, a significant increase from the original ROAD design.¹⁴ In fact, this structure has not yet been canceled; however, administrative limitations along with conservative tactic of conducting combat operations engaging a huge number of supporting and auxiliary units, plus a complicated system of rear support services still decrease a

¹¹ William W. Epley, *America's First Cold War Army 1945-1950*, The Institute of Land Warfare Papers, Association of the United States Army, *The Land Warfare Papers*, No.15, 1993, pp.19-23.

¹² Robert A. Doughty, *The Evolution of U.S. Army Tactical Doctrine, 1946-1976*, Ft. Leavenworth, Kansas: Combat Studies Institute, 1979. pp.17-19.

¹³ David W. Hogan, Jr., *225 Years of Service: The U.S. Army, 1775-2000*, Center of Military History United States Army, Washington D.C., 2000, p.29.

¹⁴ John L. Romjue, *From Active Defense to Air-Land Battle: The Development of Army Doctrine 1973-1982*, Ft Monroe: Historical Office, TRADCOM, 06.1984, pp.40-42.

division's mobility and flexibility. As a result, the above-mentioned arguments should be considered major reasons why the leadership of the U.S. Army, with the strong support of the Congress and the new Administration of President Bush, has considered the possibility of making fundamental structural changes under the "New Vision," a plan to transform the U.S. Army. In this plan, "medium-weight brigade-size" combat units will be the key elements of the U.S. Army. Indeed, huge "arms-heavy division-based" units have become cumbersome for transient battles of the 21st century. The U.S. Army intends immediately to develop a force that is deployable, agile, versatile, lethal, survivable, sustainable and dominant at every point along the spectrum of operations. The vision statement establishes a goal to deploy a combat capable brigade anywhere in the world within 96 hours after liftoff, a warfighting division on the ground in 120 hours, and five divisions within thirty days.¹⁵ "We know that we can move heavy brigades, and we have done it, in 96 hours. But that takes a significant amount of pre-deployment planning and rehearsal. What we are after here is the capability to put that combat-capable brigade anywhere in the world in 96 hours" stated the Chief of Staff of the U.S. Army, General Shinseki.¹⁶

As a matter of fact, the U.S. Army's decision to reorganize, and to transform itself into an Army with new combat capabilities is not a singular example, for it is happening around the world. Even a quick survey of the Army of Canada, Germany and Ukraine will give the same vision of the process of the force transformation.

¹⁵ Press Conference Secretary of the Army, Louis Caldera and Chief of Staff of the Army, General Eric K. Shinseki, Association of the United States Army, Washington D.C., 10.12.1999, <http://www.fas.org/man/dod-101/army/unit/docs/r19991014ausapress.htm>

¹⁶ Chief of Staff of the U.S. Army, General Eric K. Shinseki, "The Army Transformation: A Historic Opportunity," *Army Magazine*, http://www.ausa.org/armyzine/shinseki_sr_00.html

In case of Canada, the Land Forces of Canada, with 19,000 regular personnel organized into three mechanized brigade groups is also not structured for quick deployment to trouble spots, such as Bosnia, and Kosovo. As a result, the military's recent Defense Planning Guidance (DPG 2000) directs the Chief of the Land Staff to "complete the development of the Army of Tomorrow and implement a plan to start its transformation."¹⁷ DPG 2000 mandates that the Army must produce a plan for a Land Force structure that will be more readily deployable. The Army has responded by initiating the Army Transformation project, which will produce a blueprint for the next five to ten years—the Army of Tomorrow. In short, the planning guidance for the project says the Army is to be a multi-purpose, combat-capable force, optimized for expeditionary operations. It will be modular in composition, in order to facilitate the effective integration of diverse capabilities for the widest number of employment scenarios, which means that the Army's combat capability will be anchored on medium-weight forces able to integrate with both lighter and heavier coalitions forces. As a result, capability redundancy will be reduced.¹⁸ Furthermore, across the Atlantic, we also see attempts to adopt a similar strategy of reforming the armed forces regardless if they belong to developed democratic nations, such as Germany or to a newly emerging democracy, such as Ukraine.

A quick review of the process inside the Bundeswehr reveals that Germany's Army is on the same path as its NATO's allies. In fact, the conflict between security-related responsibilities and financial constraints constitute the framework for the Bundeswehr planning. Since October 1990, the all-German armed forces have been

¹⁷ *Defense Planning Guidance (DPG 2000)*, Chapter 2: "Strategic Direction," <http://www.vcds.dnd.ca/>

¹⁸ "Army Regrouping in Face of Cuts," *Jane's Defense Weekly*, Vol.33, 02.02.2000, Issue # 5.

reduced from their overall strength of around 600,000 to an interim ceiling of 370,000. In July 1994, the German government fixed the future peacetime strength of the armed forces at 340,000; their wartime strength will amount to approximately 680,000.¹⁹ The changes in the political and strategic environment require a change in force structure. Different categories of forces have been established:

- The mobilization-dependent Main Defense Forces continue to be the backbone of national and Alliance defense.
- The readily operational Reaction Forces—approximately 50,000 strong—constitute, first of all, the active component of national defense designed to protect the mobilization and deployment of the Main Defense Forces.²⁰

The cornerstone of the organizational structure of the Army is the corps, which will exercise control over the operational divisions, which are composed of two or three brigades.²¹ In sum, with its forces, the German Army will be able to be employed in tasks across the entire spectrum of military operations.

Speaking about Ukraine, it is necessary to point out that on May 29, 2000, the National Security and Defense Council of Ukraine, jointly with the President, adopted a revised program for developing the armed forces, covering the period to 2005. The key objective of the new program is to have a battle worthy, modern, deployable, affordable army of optimal size.²² Ukraine's Defense Minister and General of the Army Oleksandr Kuzmuk, detailing new plans for the Armed Forces in Kiev on May 31, 2000, stated that these transformations are closely connected with structural changes. In particular, excess command units will be removed, and various types of the land forces

¹⁹ *German Security Policy and the Bundeswehr*, <http://bundeswehr.de/index.html>

²⁰ *Ibid.*, <http://bundeswehr.de/index.html>

²¹ *Ibid.*, <http://bundeswehr.de/index.html>

²² *The State Program of the Ukrainian Armed Forces Reform and Development until 2005*, http://www.mil.gov.ua/eng/derg_prog/index.htm

brigades will replace five mechanized divisions, which should make them more deployable and less costly.²³

The current state of the Ukrainian Armed Forces and the potentially evolving situation on its borders will show that in order to conduct successful operations in local armed conflicts in the foreseeable future, the Ukrainian Army will need to create independent operational groups of forces. These forces will be comprised of different combined armed units under time constraints from several territorial commands, where these ground forces' units will play a key role. Therefore, the ground forces should have combat-ready formations at a level sufficient to conduct a limited armed conflict. The basic principle of waging battles is inflicting the maximum damage to the enemy with the minimal losses to one's own army. In order to enhance the combat readiness and operational effectiveness of the troops, it is necessary to shift to the modern, mobile, deployable combat structure of the Ukrainian Army based on medium-weight brigade-size units.

The Ukrainian Army is also in the process of transformation. Ukraine's defense priorities are focused on moving from the current large division-based structure to the medium-weight brigade-size Army, thereby reforming it to modern standards. Hence, the two-years experience, which the U.S. Army has received while transforming its structure, can serve as an example for the Ukrainian Army's reformation plan. In this case, there should be heavy emphasis on research, model-building and theory. Equally important is that Ukraine cannot ignore the practical realities of maintaining combat readiness, and trained forces with almost no funding and with deteriorating equipment.

²³ Serhiy Zgurets, "Modern, Mobile, Battleworthy and Affordable," *The Day*, <http://www.day.kiev.ua/DIGEST/2000/018/1-page/1-p2.htm>

Indeed, the current geostrategic environment along with internal security needs require the Ukrainian Army to have five or six medium-weight efficient and effective combat brigades "on battlefield" instead of five or six cumbersome divisions "on paper."

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II. BACKGROUND OF THE U.S. ARMY REORGANIZATION

*Every age has its own kind of war, its own limiting conditions,
and its own peculiar preconceptions.²⁴*

~ Carl Von Clausewitz

A. EVOLUTION OF THE U.S. ARMY DIVISIONAL STRUCTURE

This chapter traces the development of the U.S. Army doctrine during the crucial period between the Korean War (1950—1953) through the Atomic Age (1953—1965) and the beginnings of the Air-Land Battle doctrine (1973) in the aftermath of the Vietnam War. Indeed, related to the issue of reforming the U.S. Army is the recurrent theme of “doctrine,” which:

....is supposed to be a clear set of guidelines for prewar preparations and wartime operations; but, in fact, doctrine is so often in flux or dispute that we must accept the condition as a normal.... Doctrine, whatever explicit or implicit, is never absent; defined simply, it is the general consensus among military leaders on how to wage war.... Doctrine may entail a kind of commitment that closes minds to alternative possibilities, and that failure or difficulties in applying doctrine may do less to change the doctrine than to strengthen the commitment; stubbornness and moral courage are qualities more easily distinguished from one another on paper than on the battlefield.²⁵

As a matter of fact, there is a natural tendency to assume that only the most recent military experience is relevant because so much has been altered by these deep, long-term changes.²⁶ Additionally, it will have become obvious that national security policy, new technology, service, and actual battlefield experience have interacted to determine the U.S. Army doctrine, and that doctrine reflects a compromise between national security

²⁴ Carl Von Clausewitz, *On War*, Edited and translated by Michael Howard and Peter Paret, Princeton, NJ: Princeton University Press, 1976, p.593.

²⁵ John Shy, *First Battles in Retrospect, America's First Battles, 1776-1965*, University Press of Kansas, 1986, pp.332-333.

²⁶ *Ibid.*, p.345.

policy and realities. However, "the great value of doctrine is less the final answers it provides, than the impetus it creates toward developing innovative and creative solutions for tactical problems on the battlefield."²⁷

Indeed, several points from the history of the U.S. Army, which certainly have had a strong influence on the strategy of transformation, requires emphasis:

- Firepower over maneuver in the doctrine of the 1940s and the Korean War;
- The experiments with the PENTANA Army during the 1950s;
- The advent of the Reorganization Objectives Army Division (ROAD), air-mobility, and the counterinsurgency of the 1960s;
- The stress on small unit operations during the Vietnam era; and the return to an emphasis on big-unit warfare in Europe during the early 1970s.
- The attempt of the joint warfare during the Desert Storm in 1991 under the Army's structure called the "Army of Excellence."
- The recent combat experience gained in the Balkan conflicts in 1993—1999.

Nevertheless, before reaching any conclusions about developing the U.S. Army's doctrine, one must keep in mind that, "...natural tendency is to read history backward, to look for the present in the past, neglecting all that for the moment does not seem relevant. But reading history backward destroyed the integrity of the past."²⁸

As a matter of fact, the U.S. Army has undergone at least five major reorganizations since the end of World War II. First was the immediate post-World War II force. This was the Army that fought the Korean War. Organizationally, doctrinally, and in its equipment, this force was almost identical to the World War II U.S. Army.

²⁷ Robert A. Doughty, *The Evolution of U.S. Army Tactical Doctrine, 1946-1976*, Ft. Leavenworth, Kansas: Combat Studies Institute, 1979, p.49.

²⁸ John Shy, *First Battles in Retrospect, America's First Battles, 1776-1965*, University Press of Kansas, 1986, p.328.

In fact, between World War II and the outbreak of the Korean War, in accordance with President Truman's policy, which directed a two-year demobilization that reduced the U.S. Army from 90 to 10 divisions, budgetary limits reduced the size of ground forces to the point that they became "hollow divisions, lacking the personnel, equipment and training required for full combat effectiveness."²⁹ For fiscal 1948, the military submitted a budget of \$22 billion; however, Truman pared that down and sent a defense-spending budget to Congress of \$11 billion.³⁰ By 1950, the National Security Council concluded that the demobilization had gone too far. The U.S. Army expanded to 20 divisions by 1953 during the Korean War, reflecting America's concern with the defense of Western Europe. The armored division retained its current organization with three combat commands, but was reduced by 2,700 personnel to about 12,000. The new infantry division also had three combat commands. The division would have about 13,500 personnel, a reduction of almost 4,000.³¹ In short, the U.S. Army of the 1950s owed much to the World War II model and was a large conscript force whose divisions were modeled on the armored division of World War II and whose fundamental tactics were based on massive application of firepower and armored shock tactics. The most important innovation for high intensity ground war was the creation of the mechanized infantry

²⁹ William W. Epley, *America's First Cold War Army 1945-50*, Arlington: The Institute of Land Warfare Papers, Association of the United States Army, *The Land Warfare Papers*, No.15, 1993, pp.19-23.

³⁰ Michael J. Hogan, *A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954*, Cambridge University Press, 1998, p.311.

³¹ Glen R. Hawkins, James Jay Carafano, *Prelude to Army XXI, the U.S. Army Division Design Initiatives and Experiments, 1917-1995*, United States Army Center of Military History, Washington, D.C. 1997, <http://www.fas.org/man/dod-101/army/unit/docs/xxi/xxi.htm>

division with each infantry battalion equipped with organic armored carriers.³² However, the expansion of the U.S. Army was not long-lasting.

By 1952, when Eisenhower was elected president, the national security state was a permanent feature of American politics and life. The new president's reliance on air-atomic power and not conventional forces "turned the emphasis on nuclear deterrence into formal doctrine."³³ President Eisenhower believed economic growth was the key to the United States' future national security. His "New Look" strategy made massive retaliation with atomic and thermonuclear weapons the centerpiece of America's defense posture. As a result, reliance on atomic weapons to deter conflict allowed for reduced spending on more expensive conventional forces.³⁴ In that new strategy, the U.S. Army was a prime target for reduction. From 1953 to 1957 the Army's budget fell from \$15 billion to \$7.5 billion. Manpower decreased from 1.5 million to 998,000 and there was a plan to reduce to 14 active divisions by 1960. Above all, by the middle of 1954, the U.S. Army submitted proposal to fight on atomic battlefields.³⁵

The second major reorganization; however, regarded as a failure, was the mid-1950s PENTANA Army that was an attempt to organize the Ground Force for nuclear combat. This project was called "Doctrinal and Organizational Concepts for an Atomic-Non-Atomic Army during the period 1960-1970," nicknamed the PENTANA Army.³⁶

³² Robert A. Doughty, *The Evolution of U.S. Army Tactical Doctrine, 1946-1976*, Ft. Leavenworth, Kansas: Combat Studies Institute, 1979, pp.6-7.

³³ Michael J. Hogan, *A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954*, Cambridge University Press, 1998, p.414.

³⁴ William P. Mako, *The U.S. Ground Forces and the Defense of Central Europe*, Washington, D.C.: The Brookings Institute, 1983, p.814.

³⁵ A. Bacevich, *The Pentomic Era*, Washington, D.C.: National Defense University Press, 1986, pp.15-19.

³⁶ *Doctrinal and Organizational Concepts for an Atomic-Nonatomic Army During the Period 1960-1970*, Abridged Edition, Ft. Monroe: USCOACOM, 05.10.1957.

In the aftermath of the Korean War, facing a tense bipolar world living under the shadow of nuclear destruction, the Army under the administration of President Dwight D. Eisenhower sought an organization and doctrines that would support the nation's policy of containing communism over the "long haul" without wasting American resources or bankrupting the American economy. The Army especially needed to develop a credible deterrent in Western Europe, where it faced the prospect of being overwhelmed by the numerically superior Soviet Army. To meet this challenge, it turned to tactical nuclear weapons that it hoped could repel an attack by the Warsaw Pact without touching off a general nuclear exchange. It also adjusted its organization to fight a tactical nuclear war, adopting atomic artillery and a new divisional organization, the so-called PENTOMIC division, which used self-contained battle groups that could supposedly fight under the confused conditions of a nuclear battlefield with only minimal direction from higher headquarters. The new organization was in line with the Eisenhower administration's desire for a military force that could provide "bigger bang" for a buck.³⁷

To be more specific, in the late 1950s, the U.S. Army reorganized each infantry division into a "PENTOMIC division" concept of five infantry battle groups; however, without organic armored mobility and protection for tactical nuclear war in Europe, this made little operational sense in the context of a battle fought primarily with nuclear weapons. These groups were, in effect, large battalions. Each battle group had five rifle companies, a combat support company, and appropriate field artillery and service support. The battle groups were self-sustaining, could be employed separately or in combinations, and remained largely unchanged during the 1950s.³⁸

Even as the Army began to overlay the PENTOMIC design over the divisions, there were concerns and criticisms about that structure, such as battle groups were not large enough to conduct a sustained attack or an aggressive defense. At the same time,

³⁷ David W. Hogan, Jr., *225 Years of Service: The U.S. Army, 1775-2000*, Center of Military History United States Army, Washington, D.C., 2000, p.29.

³⁸ Robert A. Doughty, *The Evolution of U.S. Army Tactical Doctrine, 1946-1976*, Fr. Leavenworth, Kansas: Combat Studies Institute, 1979, pp.14 -15.

eliminating of the battalion structure decreased flexibility; the battle group could not control and tactically deploy subordinate companies efficiently.³⁹ Furthermore, the PENTANA design justified demands for additional resources. The PENTANA Army's strategy called for developing new weapons and equipment, as well as increasing manpower. Meanwhile, in December 1955, PENTANA foresaw a universal, air transportable division of 8,600 men to replace existing divisions. The only problem was the Army did not have the money or the technology to implement that concept.⁴⁰

After that, the PENTOMIC division structure was abandoned in the early 1960s when the U.S Army adopted for all divisions the combat command organization of the armored division. Combat commands were renamed brigades. Each division had three brigade headquarters into which various numbers of battalions could be joined together. All divisions were similarly organized. Some were heavy (armored or mechanized) and some were light (infantry and airborne), depending on the mission and types of battalions assigned, which were the principal differences between divisions.⁴¹

In January 1959, General Bruce C. Clarke, the Commanding General of CONARC (Continental Army Command), directed a new study titled, "Modern Mobile Army 1965-70 (MOMAR I)" to provide an objective for modernizing the U.S. Army to be capable of fighting nuclear or conventional wars anywhere in the world against a variety of foes.⁴² The new design included several essential concepts. MOMAR I eliminated the corps echelon and had the field army directly control the divisions. The design emphasized mechanization. There would be only two types of divisions, heavy

³⁹ Ibid., pp.17-19.

⁴⁰ Ibid., pp.17-19.

⁴¹ Ibid., pp.17-19.

⁴² Ibid., p.19.

and medium, with all units completely mounted in organic vehicles. To provide rapid response forces, the concept also envisioned using air transportable brigades instead of airborne divisions. The MOMAR I divisions had five self-sustained combat commands, which were a hybrid of the regiments and combat commands of World War II. However, the MOMAR I design was never tested.⁴³

The search for more flexible conventional capability continued to propel the need for a new division design. Major changes in America's strategic approaches added force to this effort; therefore the U.S. military strategy had shifted from massive retaliation to flexible response. President John F. Kennedy having "personal interest in guerilla warfare"⁴⁴ believed that the most likely future military confrontations would be in limited wars that did not bring the superpowers into direct conflict. The military needed to be able to respond "flexibly" to these threats.

In 1961, after the point when the new administration of President John F. Kennedy adopted the strategy of "flexible response" under which the United States would respond to the different forms of threat and aggression across the spectrum of conflict, ranging from nuclear exchanges through conventional warfare, to low-key assistance to countries fighting "wars of national liberation" sponsored by the former Soviet Union and its allies. The U.S. Army dropped the PENTANA organization in favor of the concept titled Reorganization Objective Army Divisions (ROAD). The ROAD division consisted of brigade task forces that were supposed to be flexible enough to fight in any environment, nuclear or non-nuclear, and to have a plausible chance of defending

⁴³ Ibid., p.20-21.

⁴⁴ Ibid., p.26.

Western Europe without resort to tactical nuclear weapons.⁴⁵ Initially, the ROAD focused only on reorganizing the infantry and armored divisions and creating a mechanized division of about 13,512 personnel for each. Eliminating the PENTOMIC battle groups, the new divisions looked like a modern fusion of the World War II designs. The new structures incorporated a common division base with a division headquarters, combat support assets and a divisional logistical support command. The predominant type of combat maneuver battalions added to the base determined the type of division. The ROAD division's three maneuver brigades reflected the influence of the old armored division combat commands. The brigades did not have any assigned units. Planners intended for the brigades to serve as tactical headquarters, each capable of controlling the operations of two to five maneuver battalions. Brigade commanders could "task organize" the battalions to create combined arms task forces.⁴⁶ Overall, one of the major changes under the ROAD concept was creating the mechanized infantry units of division, brigade and battalion size. What is more, the ROAD division reorganization put the Army firmly back on the track of making cumulative improvements on previous combat-tested designs.⁴⁷

Beginning in 1972 the Army tested another variation of the ROAD design termed the, "Concept Triple Capability" (TRICAP) mixing the capabilities of the armor, airmobile and air cavalry units employed in Vietnam. The experimental force, totaling fewer than 14,000 personnel, consisted of armored, airmobile and air cavalry combat

⁴⁵ David W. Hogan, Jr., *225 Years of Service: The U.S. Army, 1775-2000*, Center of Military History United States Army, Washington, D.C., 2000, p.29.

⁴⁶ *Reorganization Objective Army Divisions 1961-65 (ROAD-65)*, "Summary of Major Events and Problems, Headquarters," The U.S. Continental Army Command, Chapter 8, USCONARC, 03.01.1961.

⁴⁷ Robert A. Doughty, *The Evolution of U.S. Army Tactical Doctrine, 1946-1976*, Fr. Leavenworth, Kansas: Combat Studies Institute, 1979, pp.22-25.

brigades. In 1974, the Army reorganized the division again, making it a standard armored division and the air cavalry combat brigade became a separate formation in 1975.⁴⁸

The third major reorganization came with the Vietnam-era force. In the mid-1970s, a number of strategic factors such as the 1973 Yom Kippur War between the Arabs and Israelis that demonstrated the vastly increased lethality of modern conventional weapons,⁴⁹ forced the U.S. Army to review the division design once again and had cost the U.S. Army a generation of weapons modernization, which should have demonstrated the vastly increased lethality of modern conventional weapons.⁵⁰ As a matter of fact,

The Vietnam War also raised serious questions about flexible response and limited war, the *raison d'être* for the Army since the Korean War. For the rest of the decade and into the 1980s, the Army focused on rebuilding its forces and adjusting doctrine for conventional war, especially the defense of Western Europe against a possible attack by Warsaw Pact forces. The Army strengthened its NATO forces with new technology and a new doctrine that emphasized maneuver, mobility, and air support. At the same time, the service continued its battle at a lower level against Marxist regimes and movements in the Third World.⁵¹

In 1975, when the Vietnam War ended, the Training and Doctrine Command (TRADOC) found the current Army division designs inadequate to meet the Warsaw Pact threat.⁵² As a result, divisions would continue to have three brigades but each brigade would be substantially larger, with a mix of tank and mechanized infantry battalions

⁴⁸ *Reconfiguration of the TRICAP Division*, The U.S. Army Combat Development Command, 1972, p.5.

⁴⁹ Richard M. Swain, *Selected Papers of General William E. De Puy*, Fr. Leavenworth: Combat Studies Institute, The U.S. Army Command and General Staff College, 1994, pp.75-112.

⁵⁰ *Ibid.*, pp. 75-112.

⁵¹ David W. Hogan, Jr., *225 Years of Service: The U.S. Army, 1775-2000*, Center of Military History United States Army, Washington, D.C., 2000, p.34.

⁵² John L. Romjue, *A History of Army 86. Division 86: The Development of the Heavy Division*, Fr. Monroe: TRADCOM, 06.1982, pp.2-7.

supplemented by antitank guided missile companies. The division would also have more organic aviation support. Though calling for larger brigades overall, the division actually had less ground-defense capability strength with smaller infantry squads and fewer tanks per platoon; however, those decreases would be compensated by more lethal weapons.⁵³ Above all, shifts in national military strategy prompted an expanded redesign effort. In conjunction with NATO, the United States had implemented a conventional force buildup to match the Warsaw Pact. To meet this objective, the U.S. Army indeed needed new weapons, an updated doctrine, and new organizations. Following the geo-strategic defeat in Vietnam, the U.S. Army slowly moved into the existing concept called the "Army of Excellence."

In 1978, the Department of the U.S. Army launched an initiative called "Division 86" and in July 1979, formally adopted this concept. Even though the Division 86's concept appeared similar to the ROAD division, the heavy division totaled about 20,000 personnel that significantly increased from the original ROAD design.⁵⁴ In fact, the Division 86 concept was designed to have flexibility, mobility and heavy combat power to withstand the echeloned attack of the Warsaw Pact armies. The logic behind the new design was to fight and win on a conventional, high-intensity battlefield in Western Europe without relying on tactical nuclear weapons. The key idea was to prevent the Warsaw Pact with their tremendous combat power from rolling over NATO's forward-ground defenses. Moreover, the U.S. Army had to be able to conduct worldwide contingency operations as well as deploy rapidly to reinforce forward NATO forces.

⁵³ John W. Foss, Donald S. Phil and Thomas E. Fitzgerald, "The Division Restructuring Study: The Heavy Division," *Military Review*, 03.1977, pp.11-21.

⁵⁴ John L. Romjue, *From Active Defense to Air-Land Battle: The Development of Army Doctrine 1973-1982*, Ft. Monroe: Office of the Command Historian, TRADOC, 06.1984, pp.40-42.

To do this, the division would need increased mobility, flexibility and firepower.⁵⁵ Overall, in the 1980s the U.S. Army was straining to meet global commitments outlined by the national military strategy. The U.S. national strategy suggested a need for the less than 11,000 personnel infantry division, the division to operate in a low intensity setting for 48 hours without external support.⁵⁶ Despite increases in defense funding at the end of President Carter's and the beginning of President Reagan's terms, the U.S. Army was in a tough situation because it had more missions than forces. What was worse, the Division-86 concept was unaffordable both in terms of manpower and resources.⁵⁷ During the 1980s, the U.S. Army fielded a motorized division and several light infantry divisions. The motorized division could rapidly deploy to a contingency area and defeat enemy forces ranging from light infantry to tank and motorized forces. Light divisions provided versatility and strategic flexibility through their capability for rapid deployment.⁵⁸

It is worth pointing out that during the 1980s, the air combat brigade concept became institutionalized while the motorized concept died during the late 1980s due to a lack of investment in a light-armored vehicle family and antagonism from both the Armor and Infantry branches of the Army. The light infantry division concept became the Army's model for air transportable units. Structurally, today's Army is quite similar to the force at the end of the Vietnam period a mix of very light and very heavy units.

⁵⁵ *The U.S. Combined Arms Combat Development Activity: Infantry Division 86*, Fr. Leavenworth, 04.1982, pp.1-5.

⁵⁶ Glen R. Hawkins, James Jay Carafano, *Prelude to Army XXI, the U.S. Army Division Design Initiatives and Experiments, 1917-1995*, United States Army Center of Military History, Washington, D.C. 1997, <http://www.fas.org/man/dod-101/army/unit/docs/xxi/xxi.htm>

⁵⁷ John L. Romjue, *The Army of Excellence. The Development of the 1980s Army*, Fr. Monroe: Office of the Command Historian, TRADCOM, 1993, pp.20-21.

⁵⁸ Glen R. Hawkins, James Jay Carafano, *Prelude to Army XXI, U.S. Army Division Design Initiatives and Experiments 1917-1995*, United States Army Center of Military History Washington, D.C. 1997, <http://www.fas.org/man/dod-101/army/unit/docs/xxi/toc.htm>

Currently, this concept does not call for any major change in the organization or the concept of operations for either the light or heavy combat formations.⁵⁹

In sum, the U.S. Army has generally been configured into either very heavy armored and mechanized units armed with large numbers of heavy fully-tracked vehicles or very light infantry-type units that are primarily foot mobile. Of course, both types of forces include a wide variety of sub-units, artillery, aviation, and all kinds of support organizations. Today, the 10-division U.S. Army of 1998 has six heavy armored or mechanized divisions on one end of the spectrum and three air transportable or light divisions on the other end. The single airmobile division lies somewhat in the middle. While the 101st airborne division is not encumbered with large numbers of armored vehicles, it is nevertheless logistically equivalent to a heavy division and difficult to move strategically.

The U.S. Army's current warfighting doctrine reflects the nature of modern warfare. It is essentially a joint doctrine, recognizing the teamwork required of all the services. The U.S. Army divisions conduct Army operations both in war and other than war arenas. All divisions are generally organized with a similar basic design. This design comprises a division headquarters and headquarters company, three ground maneuver brigades, an aviation brigade, an artillery battalion, a support command, a cavalry squadron, an air defense artillery battalion, an engineer battalion or brigade, a signal

⁵⁹ *Prepare the Army for War*, TRADOC 1973-1998, Chapter IV, "Force Design," <http://140.153.246.2/historian/pubs/TRADOC25/contents.htm>

battalion, a military intelligence battalion, a military police company, and, in most cases, a chemical company.⁶⁰

The early 1990s brought significant changes to the world and to the U.S. Army. The dissolution of the Soviet Union and the apparent end of the Cold War presented threats that were more ambiguous and regionally focused. In fact, the collapse of the Soviet Union and federal budget deficits generated a demand for rapid force reductions. While forces shrank, the United States did not plan to retreat from its global responsibilities. The national military strategy called for a combination of strategic deterrence, forward deployed forces and the ability to respond to regional crisis. At the same time, the strategy established exacting standards for the employment of military forces. Forces would only be employed where clear-cut objectives had been established. When military power was used, it would be applied with overwhelming force to ensure quick and decisive victory with minimum casualties.⁶¹

B. THE GULF WAR AND ARMED CONFLICTS IN THE BALKANS

On February 24, 1991, after more than 180 days of maritime interception operations and 41 days of bombing, the U.S. "Army of Excellence" entered its test of battle during Operation Desert Storm. The ground offensive's objectives were to eject the Iraqi Armed Forces from Kuwait, to destroy the Republican Guard in the Kuwait Theater of Operations (KTO), and to help restore the legitimate government of Kuwait. When the plan of the Operation Desert Storm was issued, it directed that the ground part of the theater campaign be conducted in four phases:

⁶⁰ Glen R. Hawkins, James Jay Carafano, *Prelude to Army XXI, the U.S. Army Division Design Initiatives and Experiments, 1917-1995*, United States Army Center of Military History Washington, D.C. 1997, <http://www.fas.org/man/dod-101/army/unit/docs/xxi/xxi.htm>

⁶¹ *The National Military Strategy of the United States*, Washington, D.C.: Government Printing Office, 01.1992, pp.6-10.

- Phase I - Logistical buildup, estimated as “a huge build-up;”⁶²
- Phase II - Force repositioning;
- Phase III - Ground attack;
- Phase IV - Tactical consolidation.⁶³

In order to put this plan into operation, the Coalition Ground Forces formed three separate groups for Operation Desert Storm:

- First was the XVIII Airborne Corps, composed of the 82nd Airborne, the 101st Air Assault, and the 24th Mechanized Infantry. In addition, the 3rd Armored Cavalry Regiment and French forces were attached to this command.
- Marines composed the second force. The 1st and 2nd Marine Divisions were combined in the northeastern part of Saudi Arabia. The 1st was composed of the 1st, 4th and 7th Marine Expeditionary Brigades and the 2nd comprised the 5th Marine Expeditionary Brigade.
- The main attack force was the VII Corps, relocated from Europe. The VII was composed of the 1st and 2nd U.S. Armored Divisions, the 1st Mechanized Infantry Division and the 3rd Armored Cavalry Regiment.⁶⁴

In short, the plan envisioned a supporting attack along the Kuwait-Saudi Arabia border by the 1st Marine Expeditionary Force and Arab Coalition forces to hold most forward Iraqi divisions in place. Simultaneously, two U.S. Army corps (VII and XVIII), enlarged with French and United Kingdom divisions would strike deep into Iraq defenses, cut Iraqi lines of communication and destroy the Republican Guards forces in the KTO.⁶⁵

⁶² Commander-in-Chief of Central Command, General Norman Schwarzkopf, “The Operation Desert Storm,” <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/scwarzkopf1/1.htm>

⁶³ Mason Carpenter, “Joint Operations in the Gulf War,” <http://www.fas.org/man/eprint/carpente.htm>

⁶⁴ *The Operation Desert Storm*, Data can be achieved through a web-site: <http://www.desert-storm.com/soldiers/army.html>

⁶⁵ Mason Carpenter, *Joint Operations in the Gulf War*, <http://www.fas.org/man/eprint/carpente.htm>

For this time, the U.S. Army had been exploring some new force design initiatives in a project called "Air-Land Battle," where future modifications to the division designs would be perfected and closely tied to the evolution of the U.S. Army's operational doctrine.

The doctrinal debate ended with the publication of a new edition of FM 100-5 in 1982 that clearly reflected a change in American military thinking from an attrition paradigm to one of maneuver. The sea change in U.S. military thinking resulted in the emergence of the concept of the Air-Land Battle. More importantly and perhaps more germane to the discussion is that the 1982 manual witnessed the beginning in Western operational thinking of a myopic focus on heavy force war in Europe based upon the conceptual model of The Deep Strike and Blitzkrieg. Clearly, the Air-Land Battle was the genesis and enduring principle of the U.S. Army's new doctrine.⁶⁶

As the strategic environment began to change in 1991 and the focus of the strategic threat moved from a single continental look to a global outlook, operational theory in the U.S. Army remained rooted in an industrial age paradigm. However, this fact did not deny that from 1973 to 1990 the Air-Land Battle concept was probably the most innovative element of the military art of 20th century. Indeed the success in the Gulf War of 1990-1991 was an acknowledgement of the effectiveness of the Air-Land Battle theory. Moreover, the foundation of Operation Desert Storm was laid in the immediate aftermath of Vietnam that played an essential role in forming key decisions related to conducting the war. Colin Powell, Chairman of the Joint Chiefs of Staff, who shifted the United States from threat-based planning to capabilities-based planning, remembers:

Vietnam is running through my mind very much. For those of us who are Vietnam veterans and rose to positions of leadership in the American armed forces later, and we all have a view that says, "If you are going to put us into something, then you owe the armed

⁶⁶ W. Semiamaw, *Western Operational Theory: Breaking the Industrial Paradigm*, "The Nature of Western Operational Theory, War, Peace and Security," <http://www.cfcsc.dnd.ca/irc/amsc/amsc1/037.html#n112>

forces,you owe a clear statement of what political objective you are trying to achieve and then you put the force to that objective and you know when you have accomplished it.⁶⁷

In fact, the U.S. doctrine, strategy, and tactics, developed originally in response to the Soviet threat to Western Europe, stressed maneuver warfare based on continuous operations, agility, and flexibility—attributes that served commanders well as they planned and executed the ground operation against Iraq. Without a doubt, years of cooperation and combined operations with in the North Atlantic Treaty Organization (NATO) smoothed integration of European allies into the operation Desert Storm.

Service doctrine for land warfare worked. Army Air-Land Battle and USMC maneuver warfare doctrine were compatible and set the example for Coalition ground operations.⁶⁸

As has been mentioned before, developments within the U.S. Army were set in the context of the U.S.—USSR conflict and focused on combat operations in central Europe against the massive, armor-heavy Warsaw Pact's threat. Programs begun in the mid-1970s reorganized the armed services on a volunteer basis, began to revise doctrine based on maneuver warfare, and formulated a long-range modernization effort. The systematic evolution of doctrine before Operation Desert Storm that stressed maneuver warfare fundamentals, coupled with a joint doctrine for air, land, and maritime operations under a unified commander were significant advantages for the Gulf War. These and other steps combined to create the most capable land force in the U.S. history.

However, it is necessary to keep in mind that when the Gulf crisis took place in August 1990, the United States was fortunate to be confronted by an enemy who yielded

⁶⁷ Colin Powell, Chairman of the Joint Chiefs of Staff, "The Operation Desert Storm," <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/powell/1.htm>

⁶⁸ "Desert Shield and Desert Storm Observations, The Ground Campaign, Accomplishments," http://es.rice.edu/projects/Poli378/Gulf/gwtxt_ch8.html

the strategic initiative once its initial objectives were seized. This afforded the U.S.-led coalition the time (nearly five months) that was needed to deploy by sea the heavy forces that would eventually lead the counter-offensive to retake Kuwait. For example, the decision to bring the 7th Corps of the U.S. Army from Europe was not made until October 1990. This chronology of the Operation Desert Storm shows some difficulties in the timeline of the 7th Corps's deploying:

- August 2, 1990: Iraq invades Kuwait.
- December 6, 1990: First ship carrying the 7th Corps equipment arrives in Saudi Arabia from Germany.
- February 6, 1991: the 7th Corps finished its buildup with the arrival of the final 3rd Armored Division equipment.
- February 24, 1991: Ground attack begins. General Schwarzkopf decided to accelerate the main attack of the 7th Corps by fifteen hours.⁶⁹

Previously mentioned, the main attack forces were the 7th Corps and the 18th Airborne Corps. In particular, the 7th Corps's missions were to attack deep into the Iraq defenses, cut the Iraqi lines of communication and destroy the Republican Guards forces in the Kuwait Theater of Operations. General Frederick Franks, Commander of the 7th Corps, in the time of Desert Storm, recalled,

As I looked at the disposition of the Iraqi forces, the mission we were given, the troops I had available to me and the time that we had, we had three fights: we had to fight against the front line Iraqi infantry, in essence the Iraqi 7th Corps, as it turns out. Then it was a fight against the tactical reserve, which was positioned right behind the front line infantry divisions; then it was a fight against the Republican Guards. So those three fights had to be sequenced in a way that would allow us to have our point of main effort initially at the breach and when the success of the breach was assured then to shift that point of main effort to mass against the Republican Guard, so essentially we had three fights, those three.⁷⁰

⁶⁹ Rick Atkinson, "The Untold Story of the Persian Gulf War 1993," This chronology of the Gulf War can be achieved through a web-site: <http://www.pbs.org/wgbh/pages/frontline/gulf/cron/>

⁷⁰ General Frederick Franks, Commander of the VII Corps, "The Operation Desert Storm," <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/franks/1.htm>

Without a doubt, the 7th Corps was the largest tactical unit on the battlefield. It was equivalent in size to the numbered field armies of World War II and Korea, but capable of creating several times the effective speed and firepower of those older units.

The 7th Corps had 146,000 American and British soldiers, five divisions, essentially five armored divisions, although one was a mechanized infantry division and one was a cavalry division, essentially five armored divisions. The 7th Corps had close to 1,600 tanks, Corps consumed well over two million gallons of fuel a day; it had a support command, vital logistics support command of over 26,000 soldiers, fifteen hospitals, over eight hundred helicopters, a sizeable force, a lot of moving parts.⁷¹

Speaking about the strategic mobility of the U.S. heavy forces such as 7th Army's Corps, Lieutenant General Calvin Waller, Deputy Commander of Central Command during the operation Desert Storm, stressed that,

When you look at the total size of this force and when you want to compare the size of it, it is 130,000 souls, men and women in that Corps, that's larger than many of our cities in the United States. I mean when you look at the number of divisions that it brought with it, with the artillery groups, with the air defense group, with the battalions of support, with the engineering battalions, with the artillery battalions, with all of the things that must support this entire Corps, you are talking about moving the equivalent of a city of 130,000 people, and let's just take a city of 130,000 people in the United States and say pick it up and move everything that's in that city, lock stock and barrel, 7,000 miles away, or 4,000 miles over the ocean I would say, less than what it was from the United States to Saudi Arabia, but that's the equivalent of what we had to do, move 130,000 people that belonged to the 7th Corps from Europe to the desert in Saudi Arabia, house them, feed them, clothe them, outfit them with everything that they needed from a toothbrush to a toilet or to a shower or what have you, an enormous undertaking logistically.⁷²

As a result, the 7th Corps had less time to integrate and to prepare its forces for battle than the other established units. Moreover, the 7th Corps training was for a Western

⁷¹ Ibid., <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/franks/1.htm>

⁷² Lieutenant General Calvin Waller, Deputy Commander of Central Command, "The Operation Desert Storm," <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/waller/1.htm>

European, NATO's conflict of the pre-1989 doctrine. Trained for a specific type of battle and trained in specific ways, moving to the Middle East environment and the Central Command (CENTCOM) arena meant a different way of waging war for the 7th Corps and its commanders. On the other hand, the 18th Airborne Corps was based in the United States and prepared mentally for a variety of different theaters and contingencies. The result was that the 18th Airborne Corps demonstrated more flexibility in regards to accommodating CENTCOM operations than the 7th Corps with its narrower mission focus. It should be noted the broader 18th Airborne Corps focus and training included extra emphasis on the CENTCOM area of operations in the 10 years leading to the Gulf War. This further emphasized the different orientations between the two corps.⁷³

In sum, the ground campaign was clearly a success and the final, crucial element in a decisive Coalition victory. The Coalition forged an effective fighting force, destroyed much of the Iraqi army, and liberated Kuwait while sustaining light casualties.

This victory was achieved through detailed planning and aggressive and strict execution according to the dictates of established doctrine. However, one hundred hours of ground combat is too short a period to form comprehensive judgments about specific strengths or shortcomings. In addition, the theater of operations, the enemy and the global political situation were unique. Nonetheless, the Operation Desert Storm victory was unquestionably enabled by many years of thought, realistic planning, new doctrinal concepts, new unit designs and structures, an investment strategy for equipment modernization, and a training strategy for all components.⁷⁴

Nevertheless, a nation that wins a conflict is often set up to lose the next one. If it is satisfied with the status quo of its forces and doctrine, it is apt to fight future wars in a

⁷³ Jeffrey T. Richelson, *Operation Desert Storm: Ten Years After*, A National Security Archive, Electronic Briefing Book, 01.17.2001, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB39/>

⁷⁴ Andrew P. Leyden, "Gulf War Debriefing Book: An After-Action Report," <http://www.leyden.com/gulfwar/summary.html>

predictable manner. Conversely, losing and bystander nations often become innovative, rebuilding and rethinking warfare to ensure victory in the next conflict. Due to an abundance of resources, the U.S. military could be effective with less than optimum integration. It would be unwise to depend on abundant resources to ensure victory in future conflicts. Despite the success of the Operation Desert Shield, strategic deployment of U.S. forces to the Persian Gulf took too long—about 150 days for five divisions and 205 days for the entire deployment.⁷⁵ As pointed out before, it took roughly a month before the U.S. Army had its first division-sized heavy force ready for operations in Saudi Arabia. Fortunately, the enemy was totally passive during the strategic deployment of U.S. forces. Unquestionably all potential future U.S. opponents took note of the fate that befell the Iraqis due to ceding to the U.S. a lengthy, undisturbed deployment period.

The U.S. had time to prepare its ground offensive while coalition-building, political and diplomatic efforts, and commercial sanctions ran their courses. The ability to rapidly move robust fighting forces would be a key challenge. The ground campaign was conducted by heavy, airborne, and air assault forces, all of which depended on large, bulky equipment for much of their combat power. Ways to improve strategic lift and tactical mobility continue to be a major priority.⁷⁶

Moreover, joint operations were not really tested. Air-land battle and true joint combined arms integration were not precisely realized during the Gulf War. With abundant, available airpower, in this conflict, there was not the pressing need to force integration. However, “the Gulf War was obviously not a failure. Instead Desert Storm served to reinforce the trends of the preceding two decades in the American military

⁷⁵ Rick Atkinson, “The Untold Story of the Persian Gulf War 1993,” The chronology of the Gulf War can be achieved through a web-site: <http://www.pbs.org/wgbh/pages/frontline/gulf/cron/>

⁷⁶ “Desert Shield and Desert Storm Observations. The Ground Campaign,” Data can be achieved through a web-site: http://es.rice.edu/projects/Poli378/Gulf/gwtxt_ch8.html

culture.”⁷⁷ Therefore, the lessons from Operation Desert Storm must be kept in context. If the United States fails to integrate effectively in its next major conflict, it may pay a price in both lives and results. Military forces will generally fight the way they train; however,

....even the most intensive training will be less-than-adequate preparation for actual combat. Veterans of combat agree that certain vital lessons can be learned only under fire. In general, it seems that nothing but experience teaches soldiers and armies how to hold the delicate balance between courage and caution.⁷⁸

Furthermore, the Gulf War revealed several characteristics of the Army’s light-heavy force structure. First, the Light Infantry Divisions, a major Army initiative in strategic power projection were noteworthy by their absence. While the 82d Airborne Division did deploy, it quickly assumed the title of “speed bump” in the face of an enemy with huge numbers of armored vehicles. General Norman Schwarzkopf pointed out that:

The 82nd airborne troops that were over there used to facetiously refer to themselves as “Iraqi tank speed bumps,” because they were light infantry and did not have the heavy anti-tank weapons they needed.⁷⁹

In addition, the operational immobility of heavy forces was further revealed during the Operation Joint Endeavor, the deployment of the U.S. Army forces to Bosnia during the winter of 1995-1996. As an example, the deployment of a reinforced brigade of only four armored and mechanized infantry battalions from southern Germany via rail and roads took nearly two months.⁸⁰ Moreover, the U.S. Army learned the importance of

⁷⁷ F.G. Hoffman, *Decisive Force. The New American Way of War*, Westport, London, 1996, pp.99-100.

⁷⁸ John Shy, *First Battles in Retrospect. America's First Battles, 1776-1965*, University Press of Kansas, 1986, pp.340-341.

⁷⁹ “The Operation Desert Storm,” Data can be achieved through a web-site:

<http://www.pbs.org/wgbh/pages/frontline/gulf/oral/scwarzkopf/1/1.htm>

⁸⁰ Michael O’Hanlon, “Can Bosnia be Reunified? Facing Military Realities in the Former Yugoslavia,”

<http://www.usis.usemb.se/sft/142/sf14201.htm>

speed in Kosovo where it took a month to ship 24 Apache helicopters 800 miles from Germany to Albania.⁸¹ As a matter of fact, recent events such as Kosovo confirms that conflicts fought for less than vital interests will continue to challenge the U.S. national security. Hence, the U.S. Army must also develop a realistic doctrine for winning them based on its own practical experience.⁸² However, it will be hard to deal with those challenges. Brig. Gen. Bantz J. Craddock, the 1st Infantry Division assistant division commander, who commanded the Task Force Falcon, the U.S. element of NATO's Kosovo peacekeeping force (KFOR), during the initial stages of the operation was confident when he said,

It is very difficult to conduct a peace support operation of the magnitude of this one and deploy in from multiple locations, in theater, out of theater...air, sea and land, coordinate it while you're trying to move into an area with no infrastructure and establish base camps at two locations...Then you have to get base camps built, which you have to secure. I think the lesson learned there is that when you try to run two major undertakings simultaneously, you must have a lot of force available and a very robust and deep command and control system. Peace operations highlight the responsibility, the dependence, the great emphasis that we must put on leadership at the lower levels—the junior leaders, the corporals, the sergeants, lieutenants. You can't centralize command and control in an operation like this. You have to decentralize it. For the military professional, you always have to focus on the high intensity. Our mission is to fight and win our nation's wars, but there has to be another focus on the peace support operations. If you understand that peace operations will decentralize the structure more than the high intensity, it will put a premium on individual, small-unit leaders.⁸³

⁸¹ Mark Thompson, "Blasting the Crusader, Why the Army's Newest and Biggest Gun May Become a Target for Bush's Defense Department," *Time Magazine*, 15.01.2001, p. 34-35.

⁸² Major General Robert H. Scales, Jr., "America's Army in Transition: Preparing for War in the Precision Age," <http://carlisle-www.army.mil/usassi/ssipubs/pubs99/armytrns/armytrns.htm>

⁸³ Dennis Steele, "Kosovo—The Task Force Commander's Viewpoint," *Army Magazine*, <http://www.ausa.org/armyzine/craddocksept99.html>

In sum, both Operations Desert Storm and Operations Joint Endeavor revealed the very large intra-theater logistic support needed to provision and move heavy armored and mechanized forces. The 100-hour ground campaign required a massive shift of supplies through the use of thousands of heavy cargo trucks and heavy equipment transporters. Operation Joint Endeavor required the extensive use of rail and road support to move one reinforced heavy Army brigade out of southern Germany to Bosnia over a 90-day period. Therefore, aero-motorized units would have had far better operational agility in a similar circumstance.

The confidence in the successful attempt of the joint operation during the Gulf War has found strong support within the U.S. military and reflected a “new” American way of war. This was under the principle of Decisive Force meaning “the use of overwhelming force in order to win without exposing American forces to protracted conflict,”⁸⁴ the U.S. Armed Forces, to a certain extent, failed to integrate fully its combat forces into an effective joint warfare. Mostly, the war was conducted by airpower. Although during the phase of ground operations, there was some integration with ground-controlled deep fire and aviation forces, the integration was not as extensive as it could have been. The bottom line was that the failure to establish effective procedures for air-ground integration, in particular when the conflict entered the ground attack phase, contributed to the failure to accomplish one of the primary objectives of the war—the destruction of the Republican Guard forces. Therefore, “the more the services can get

⁸⁴ F.G. Hoffman, *Decisive Force. The New American Way of War*, Westport, London, 1996, p.99.

away from linear thinking and begin thinking in depth and simultaneous attack, the more effective the combat capability will be.”⁸⁵

In the aftermath of the Operation Desert Storm, Congress mandated the Department of Defense to reassess strategic mobility requirements in light of the changing world environment. The October 1993 “Bottom-Up Review” concluded that the military could increase the ability to deploy only through investments in airlift, sealift, equipment prepositioning, deployment infrastructure, and related initiatives. Hence, the U.S. Army recognized that the world environment would continue to change.⁸⁶

As a result, the next step of restructuring the active component of the U.S. Army from 12 to 10 divisions was announced by Secretary of the Army Togo D. West, Jr., and Chief of Staff, Army, General Gordon R. Sullivan. The plan stabilized the force at an active-duty end strength level of 495,000 soldiers as the Army prepared to transform into the force of the 21st century. Accordingly to this plan, the ten-division Army would consist of four light divisions and six heavy divisions, all stationed at existing installations. All divisions would consist of three active-component brigades. Some divisions, such as the 2nd Infantry Division at Ft. Lewis would have one brigade stationed at a different location. Four corps headquarters would remain in the force structure: First Corps at Ft. Lewis, Third Corps at Ft. Hood, Fifth Corps in Germany, and Eighteenth Airborne Corps at Ft. Bragg.⁸⁷

⁸⁵ Jeffrey T. Richelson, “Operation Desert Storm: Ten Years After,” Electronic Briefing Book, 01.17.2001, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB39/>

⁸⁶ David Isenberg, “The Pentagon’s Fraudulent Bottom-Up Review,” *Policy Analysis*, No. 206, 04.21.1994, <http://www.cato.org/pubs/pas/pa-206.html>

⁸⁷ “Army Announces Force Structure Plan,” Office of Assistance Secretary of Defense, *News Release*, <http://www.defenselink.mil/cgi-bin/dlprint>

In summary, what the U.S. Army has lacked since 1945 are medium forces that combine a degree of mobility, firepower, and protection greater than the generally foot-mobile light forces, yet are less strategically and operationally cumbersome than the heavy armored and mechanized units. The latter require either relatively slow sealift, rail/heavy equipment transporter support in order to deploy into areas where forces are not already stationed.

During the Cold War, the primary and potentially most challenging of the U.S. Army missions were the defense of Western Europe and Korea, which were associated with armor-heavy division-based units greatly depended upon prepositioned equipment sets and sealift. Since 1991 the U.S. Army has taken certain steps that have enhanced the strategic ability to deploy its traditional heavy forces.

In fact, lower intensity but higher frequency operations have pointed out an inadequacy in the structure of the U.S. Army. Its heavy divisions, well suited and forward stationed for Western European war, needed a considerable amount of time to deploy to Southwest Asia during the Gulf War in 1990. Since the strategic environment can frequently change faster than the force structure can adapt, the national security strategy, military doctrine, and the allocation of resources can also change.

Today, the U.S. Army is challenged to deploy heavy formations quickly to all of the locations it is required to go. Conversely, the U.S. Army's light forces can deploy quickly around the globe but lack the lethality, survivability and staying power of heavy forces. Therefore, the medium-weight brigade-size unit force structure has been determined to be just the right size to combine arms (armor, infantry, artillery, engineers). With the enlargement of the division structure, it becomes harder to fight as an entity.

As a result, in 1999, the U.S. Army announced a “New Vision” of its transformation calling for a future capability to put a brigade-combat team anywhere in the world in 96 hours after liftoff—for stability and also support operations and for warfighting. This army can deploy a warfighting division on the ground in 120 hours and five divisions in 30 days—a capability that will further increase the Army’s ability to fight as part of a joint force and win the nation’s wars. As expected, a new U.S. Army warfighting organization will not only be more deployable and effective in Joint operations, but the reorganized information age ground forces will also be significantly less expensive to operate, maintain, and modernize than the U.S. Army’s current Cold War division-based organizations.

Indeed, the United States must opt for reform and reorganize of the nation’s ground forces and avoid repeating a historic mistake of always fielding an effective army just in time to avoid defeat, but too late to deter an aggressor.⁸⁸

⁸⁸ Gen. Eric K. Shinseki Chief of Staff, U.S. Army, “The Army Transformation: A Historic Opportunity,” *Army Magazine*, http://www.ausa.org/armyzine/shinseki_sr_00.html

III. STRATEGIC ENVIRONMENT AND SECURITY ISSUES

By analyzing some threats brought by the strategic environment in the new world order, the purpose of this chapter is to show tight links among issues of strategic environment, national security, military doctrine, and force structure as well. The period after the Cold War has been characterized by rapid power transitions: the world has become highly unpredictable. In fact, the end of the Cold War brought dramatic changes in international security and relations. Even though military power has become truly unipolar, by the existence of the U.S. Armed Forces, economic power is still a multipolar system structured by three centers of power: the United States, Japan, and Europe, which shape the strategic environment of the 21st century. Hence, the global security system of the early international century will be configured into three tiers each defined by economics and the degree of governability.

The first tier will include the technologically advanced states of Western Europe, North America, and the Pacific Rim. Intense economic competition may occasionally lead to political conflict and even spark full-blown information warfare, but there will be no traditional warfare within the first tier. Second tier regions will retain most features of Cold War era nation-states. Periods of rapid internal political transition will occur cyclically and often will be violent. Second tier states may occasionally resort to conventional, inter-state war, and will retain large land armies equipped with some sophisticated weapons systems. The third tier will experience ungovernability, occasional anarchy, endemic violence, severe ecological degradation, the politicization of primal loyalties, and political fragmentation. Third tier states may engage in short, spasmodic wars with each other.⁸⁹

⁸⁹ Steven Metz, William T. Johnsen, Douglas V. Johnson II, James O. Kievit, Douglas C. Lovelace, Jr, *The Future of American Landpower: Strategic Challenges for the 21st Century Army*, Strategic Studies Institute, 03.12.1996, Summary VII.

Therefore, geopolitical interactions based upon the international order, stability and the balance of power will continue to influence the national interests of the United States; however, global restraint, as maintained through the balance of power during the Cold War, will be more difficult to achieve as the world may disintegrate into areas of multipolar tensions with competing regional authority.

Moreover, some states, such as the former Yugoslavia's Federation, may disintegrate into smaller, ethnically based units. This fragmentation will cause both interstate and intrastate conflict. It can be assumed that these regional powers would not try to match American air, land, and sea capabilities and would use indirect or asymmetrical means. However, the United States must anticipate the rise of regional racial, economic and religious tensions along with threats from fanatic religious groups, criminal cartels, and transnational terrorists, which will challenge the U.S.'s vital national interests.

The U.S. National Security Strategy defines "vital national interests," as interests including the physical security of the U.S. territory and the security of the territory of the U.S.'s formal allies.⁹⁰ These interests also include the safety of American citizens at home and abroad as well as the U.S. security in maintaining access to trade and resources that are vital to its economic prosperity. To defend these vital interests, the U.S. must be prepared to use military force "unilaterally and decisively."⁹¹ Obviously, it will make more sense to react quickly to a threatening situation, which, if left unattended, might

⁹⁰ *A National Security Strategy for a New Century*, Washington D.C.: U.S. Government Printing Office, 10. 1998, p.5.

⁹¹ *Ibid.*, p.5.

grow into a disaster requiring a massive intervention that could be costly monetarily and in the lose of lives.⁹²

Considering the issue of strategic environment, one must emphasize that the United States and its allies continue to face the threat of coercion and large-scale, cross-border aggression by hostile states with significant military power. As an example, President of Iraq, Saddam Hussein, has once again challenged the international order by forming an army "to liberate Jerusalem" from Israeli rule and has already announced the mobilization of more than 6.5 million volunteers for a jihad, (Muslim holy war), against the Jewish state.⁹³ Another recent example confirms an argument about the fragile nature of global security in today's world. In February 2001, Russian military forces were engaged in a large-scale exercise involving strategic and conventional military forces. Analysts viewed the exercises as purposely timed to exert political influence on new the U.S. administration and its plans for a national missile defense, which Russia opposes. "These exercises appear to be Russia deciding to deal with the West after the fashion of the Soviet Union in the early 1980s, namely to bluster in order to try to prevent an American strategic overture, in this case missile defense," R. James Woolsey, a former CIA director and arms control negotiator, said in an interview.⁹⁴

Additionally, increasingly capable and violent terrorist groups, drug cartels, and international crime organizations directly threaten the U.S. national security and undermine U.S. policies and alliances. For example, Osama bin Laden, the alleged terrorist who officially declared "war" against the U.S., tried to buy uranium by spending

⁹² Ibid., p.6.

⁹³ "Saddam Forms Army to Liberate Jerusalem," *Agency France-Press*, Baghdad, 02.07.2001, <http://asia.dailynews.yahoo.com/headlines/world/article.html>

⁹⁴ Bill Gertz, "Russian Forces Conduct Massive War-Games Exercise," *The Washington Times*, 02.15.2001.

\$1.5 million in the black-market in order to build nuclear weapons in the early 1990s.⁹⁵ However, faced with the reality of the U.S. military intervention, opposing forces will likely avoid a direct conflict with the U.S. Armed Forces by using asymmetric capabilities. For example, even Russia, according to its Defense Minister, Igor Sergeyev, is willing to make contingency plans to respond to President Bush administration's antimissile plans. He said that Russia was not going to launch a new missile buildup, which it cannot afford, but "asymmetrical" technologies that would penetrate any missile shield.⁹⁶

The feature of the asymmetric warfare is to attack your enemy's weakness and to avoid the enemy's strength. Such threats also include guerilla, paramilitary, and Special Forces. Regardless of the nature or origin of these threats, these armored groups, equipped with man-portable air defense systems, anti-tank guided missiles, mortars, explosives, and machine guns will be capable of not only achieving limited objectives during high-tempo combat operations, but also during long-term guerilla operations. Furthermore, the global proliferation of weapons technologies and military hardware poses increasing challenges to regional stability. As a matter of fact:

The world in the late twenty century clearly has become a more dangerous habitation than ever before for all human beings.... The age-old pattern of conflict among and between people has become intertwined with newly created capabilities for global destruction. In this environment of challenge and conflict, the United State bears broad responsibilities for maintaining a precarious peace and protecting its own and its allies' interests. The U.S. Army has been given challenging missions and heavy burdens by the makers of national policy. The Army not only must prepare for war that could

⁹⁵ David Usborne, "Bin Laden Tried to Build Nuclear Bomb," *Independent News*, New York, 02.09.2001, <http://www.independent.co.uk/news/World/Americas/2001-02/bomb090201.shtml>

⁹⁶ Patrick E. Tyler, "Russia Says U.S. Antimissile Plan Means an Arms Race," *New York Times*, 02.06.2001, <http://ebird.dtic.mil/Feb2001/e20010206says.htm>

begin today but must also anticipate the nature and evolution of likely future conflicts.⁹⁷

As a matter of fact, the U.S. Army is quite strong on the battlefield because of its superiority in information management, precision indirect fires and close combat. Potential adversaries have watched as the U.S. conducted operations since Desert Storm and these adversaries have learned how to challenge its armed forces in asymmetric ways rather than confront the U.S. Army head-on in a conventional fight. They will seek to create conditions where an enemy's relative advantage cannot be applied, is degraded or is neutralized. As a result, a country that chose to challenge the U.S. would be forced to find another way including asymmetric warfare.

America's unrivaled military superiority means that potential enemies.... that choose to attack us will be more likely to resort to terror instead of conventional military assault. Moreover, easier access to sophisticated technology means that the destructive power available to terrorists is greater than ever. Adversaries may thus be tempted to use unconventional tools, such as weapons of mass destruction, to target our cities and disrupt the operations of our government.⁹⁸

In addition, the nature of the existing and emerging threats plus continued worldwide urbanization will make military operations in regions with weak infrastructure (roads, rail, bridges) and complex/urban terrain extremely likely. Future adversaries tactics may be unconventional and they will exploit the use of cities, populated areas, and complex terrain in order to negate the U.S. Army superior capabilities. As in the recent experience in Kosovo, the U.S. Army's units frequently operate in complex and urban terrain where adversaries could negate many of the U.S. Army's advantages. Indeed, to

⁹⁷ John Shy, *First Battles in Retrospect America's First Battles 1776-1965*, University Press of Kansas, 1986, Preface-IX.

⁹⁸ "Combating Terrorism: Presidential Decision Directive 62," Office of the Press Secretary, Annapolis, Maryland, 05.22.1998, <http://users.erols.com/nbcgroup/0522pres3.htm>

ensure a quick and decisive victory with minimum casualties, U.S. forces must be prepared to face the potential challenges of asymmetric threats.

In sum, more probable than major theater war (MTW) is the possibility that the United States will be confronted by a whole series of lesser crises or small-scale contingency (SSC) operations. Civil wars, armed struggles between religious and ethnic groups are all examples of the kinds of operations where the U.S. Army could conceivably be deployed. Many of these future conflicts would occur in an urban environment. What is more, areas where such breakdowns in civil order could occur are where the United States does not have permanently stationed forces. Indeed, this changing reality has a significant impact on how the future U.S. Army should be configured.⁹⁹ According to the study, "The Future of American Landpower: Strategic Challenges for the 21st Century Army," several strategic challenges will be crucial for the Army in the future security environment:

- *Reconcile Long-Term and Short-Term Imperatives.* Strategists must maximize the chances of long-term success while minimizing short-term risk. If the future global security system is relatively benign, the Army can minimize the resources it devotes to long-term modernization and force development. But if conflict dominates the future global security system, the United States must accept greater short-term risk and focus on force development and modernization.
- *Maximize Efficiency.* American military forces will remain small in comparison to the number and scope of tasks they will be given. This creates an overriding need for efficiency... Technology probably holds greater promise of bringing dramatic improvements in efficiency, but it requires extensive investment. Reliance on technology can also generate unintended adverse effects... challengers might seek low-tech, asymmetric responses to counterbalance the American advantage.

⁹⁹ Hans A. Binnendijk and Patrick Clawson, "The Strategic Assessment 1997, Flashpoints and Force Structure," Washington D.C.: Institute for National Strategic Studies, National Defense University, <http://www.ndu.edu/inss/sa98/sa98cont.html>

- *Undertake a Controlled Institutional Revolution.* The historical boundaries of landpower may be stretched as the basic concept of national security expands to include, e.g., protection against violent threats to national information and information systems, the environment, and public health. Hence, the Army must decide whether warfighting is the function for which it exists or simply one function among several.¹⁰⁰

The chronicles of military history emphasize the importance of preparing for future security challenges. As Clausewitz observed, every age has indeed been marked with its own kind of war.¹⁰¹

Since 1945 the United States has faced seven major military challenges that required deployment of significant forces and operations in the face of a potentially hostile force: the Berlin Airlift, the Korean War, Lebanon (1958), the Dominican Republic, Vietnam, Grenada, and Desert Storm. This does not include the Bay of Pigs, the Cuban Blockade, Central America of the 1980s, Just Cause, or the many moves and countermoves of the Cold War such as the deployment of forces when the Berlin Wall went up. Thus, there was a significant confrontation once every seven years on average, well within the planning horizon of the Department of Defense.¹⁰²

Historically, the U.S. Army has been criticized for preparing for the last war. Since the end of the Cold War era, however, the U.S. Army has been willing to create a force capable of winning the next war in an era characterized by a volatile international security environment, accelerated technological advances, shifts in military art, and forecasts of increasingly constrained fiscal resources. Today, in fact, the United States is at the height of its influence and prosperity. The United States remains the world's most

¹⁰⁰ Steven Metz, William T. Johnsen, Douglas V. Johnson II, James O. Kievit, Douglas C. Lovelace, Jr., *The Future of American Landpower: Strategic Challenges for the 21st Century Army*, Strategic Studies Institute, 03.12.1996, Summary VIII-IX.

¹⁰¹ Carl Von Clausewitz, *On War*, Edited and translated by Michael Howard and Peter Paret, Princeton, NJ: Princeton University Press, 1976, p.593.

¹⁰² David S.C. Chu, *The American Military's Response to a Changing World Order: What Does It Imply for Manpower Requirements?* Chapter 14, p.278.

powerful force protecting peace and universal values of democracy. However, at a time of rapid globalization, the U.S. must be vigilant to defend its national interests.

In summary, the world continues to evolve into a more dynamic, uncertain, and complex environment. Since the end of the Cold War nearly a decade ago, there have been repeated calls for the U.S. Army to make major changes to accommodate a transformed geostrategic environment. Information technology advances have created powerful asymmetric threat options for potential adversaries, and continue to expand the potential nature of future conflict. Although the mentioned above "forces" will be unable to match the combat power of heavy U.S. weaponry, these forces still pose difficult challenges to the U.S. and its Army.

On January 5, 2000, the White House released a report entitled, "A National Security Strategy for a New Century." The document preface states, "we are pursuing a forward-looking national security strategy for the new century. This report ... sets forth that strategy. Its three core objectives are:

- To enhance America's security.
- To bolster America's economic prosperity.
- To promote democracy and human rights abroad."¹⁰³

Despite the many U.S.'s of significant advantages, this fractured world with growing threats of terrorism, horrible drug problems, organized crime and the proliferation of weapons of mass destruction, complicates the U.S. ability to achieve these objectives. Potential regional aggressors possess a range of capabilities that could bring significant dangers to the U.S. National Security and operations conducted by the U.S. Armed Forces. The common predictive threads for the evolving global security

¹⁰³ The report "A National Security Strategy for a New Century" can be accessed at the following site:
<http://www.pub.Whitehouse.gov/WH/Publications/html/Publications.html>

environment are: significant complexity, wildly ranging scenarios of power centers and polarities, multiple revolutions across several domains, and profound uncertainty.¹⁰⁴

More importantly, interdependence will be the defining characteristic of the future global security system. Because of interdependence, the global security system will continue to experience cycles with periods dominated by violence followed by widespread resolution of conflicts. As an example, over the past decade the Army has been involved in more missions than in the previous 40 years. Since 1989, the Army has deployed ready forces in response to National Command Authority directives 35 times. Some of these deployments have been brief; others have evolved into ongoing commitments of our forces.

The U.S. Army has been in Kosovo for a year, Bosnia for five, Southwest Asia for 10, the Sinai for 18, Korea for 50 and Europe for 55 years.¹⁰⁵ As a result, the U.S. Army must be prepared to resolve those emergencies in the scale from small-scale contingencies operations (SSC) to major theater of war (MTW). The future will be even more complex, uncertain, and challenging than today. There is a growing trend toward asymmetric challenges, such as information warfare, weapons of mass destruction, threats of chemical munitions, terrorism, missile strikes against the homeland, and covert attacks against commercial and financial infrastructures. As a result, a very complicated threat-mix requires the U.S. Army to have, as defined by former Chairman of the Joint Chiefs of Staff, Gen. Colin Powell, a capabilities-based force instead of a threats-based force.

¹⁰⁴ Robert Frost, *The Growing Imperative to Adopt "Flexibility" as an American Principal of War*, Strategic Studies Institute, The U.S. Army War College, 10.15.1999, p.29.

¹⁰⁵ Press Conference Secretary of the Army Louis Caldera and Chief of Staff of the Army, General Eric K. Shinseki, Association of the United States Army Washington, D.C. 10.12.1999, <http://www.fas.org/man/dod-101/army/unit/docs/r19991014ausapress.htm>

Overall, the U.S. possess strong political, economic and information power and remains the most forceful military power in the world, and the U.S. Army, as an “instrument of the U.S. political will,”¹⁰⁶ provides the land component of the U.S.’s superiority. Today’s light forces of the U.S. Army are certainly good for various missions conducted in different types of terrain including urban, but did not have adequate capabilities of lethality and survivability needed for sustained conventional operations. Furthermore, the lack of alarming military threats today does not discount the rise of a major military competitor in the future. While the U.S. does not anticipate a threat in the near future, the U.S. Army should be prepared in the near- and far-term to respond forcefully to a currently unidentified opponent. The U.S. Army must be prepared to meet tomorrow’s security challenges by implementing a strategy that will transform it from a heavy force to a more versatile “medium-weight brigade-size” force. “America cannot afford to enter the new millennium as a nostalgic posthegemon with expensive industrial-age armed forces that simply do not fit the new strategic environment. In practical terms, this involves replacing old military structure and concepts.”¹⁰⁷

¹⁰⁶ General, Eric K. Shinseki Chief of Staff, U.S. Army, “The Army Transformation: A Historic Opportunity”, *Army Magazine*, http://www.ansa.org/armyzine/shinseki_sr_00.html

¹⁰⁷ Douglas A. Macgregor, *Breaking Phalanx. A New Design for Landpower in the 21st Century*, The Center for Strategic and International Studies, 1997, p.2.

IV. FISCAL YEAR 2001 AND THE U.S. ARMY TRANSFORMATION

Historically, the U.S. and its Army have been poorly prepared for many wars or at least for their first battles. The reasons for the lack of America's preparedness for war vary, but key among them was complacency in times of peace. The American military leadership did not establish a link between their national prosperity and their military excellence. That kind of national complacency led to early disasters in past wars. Additionally, the apparent contradiction between "time" and "money" found its reflection in the now-famous observation of General, George Marshall during the U.S. preparations in the earliest days of World War II, "Yesterday, we had time but no money. Today we have money but no time." Today, the U.S. Army is moving to break that cycle of history by attempting to transform itself during an unprecedented period—a time of relative peace, of unrivaled economic prosperity and of stampeding technological progress.

As a matter of fact, the U.S. Army transformation strategy is designed to restructure and modernize the present Army from a Cold War dominated arms-heavy division-based force to a full spectrum medium-weight brigade-size force geared to 21st century requirements.¹⁰⁸ In order to accomplish this goal, the U.S. Army intends to:

- Accelerate the research and development of the Future Combat System (FCS);
- Provide funding for the Interim Armored Vehicle (IAV), which offers a baseline capability for a mounted Initial Brigade Combat Team (IBCT);

¹⁰⁸ "Transformation for the 21st Century. Initial Brigade Combat Team," Data can be achieved through a web-site: <http://www.lewis.army.mil/transformation/>

- Provide funding in FY-2001 to establish two Initial Brigade Combat Teams (IBCTs) at Fort Lewis, Washington;
- Accelerate specific programs to improve strategic responsiveness, increase lethality of light forces, and recapitalize legacy systems;
- Maintain the focus on information dominance;
- Restructure programs that did not meet the Army's vision of providing resources for the U.S. Army Transformation.¹⁰⁹

In fact, many of these key points connect with the budget issue, which is under the specific relationships between the Congress and the U.S. Army. Fortunately, the Congress, in the words of Jerry Lewis, Chairman of the House Appropriations Defense Subcommittee, strongly supports the U.S. Army's commitment:

We are encouraging the Army—and all of the armed forces—to embrace changes that will make sure they are ready for the challenges of the 21st Century. We must make that investment, for while ensuring peace is expensive, the alternative is war, whose costs are unimaginable. The Army—and all our armed forces—must find ways to meet the rapidly developing threats to world safety that we have seen in our last few engagements and Congress heartily supports this commitment.¹¹⁰

Under those circumstances, in July 19, 2000, the House voted overwhelmingly 367 to 58 approving the House-Senate conference report on the \$288 billion Department of Defense spending plan for FY-2001. The legislation added nearly \$1.6 billion over FY-2000 to help the U.S. Army, according to its Transformation Plan, quickly develop two medium-weight brigade-size combat teams as well as new lightweight combat vehicles using the newest technology. In sum, the FY-2001 budget added:

¹⁰⁹ Ibid., <http://www.lewis.army.mil/transformation/>

¹¹⁰ Congressman Jerry Lewis, *Press Release*, http://www.house.gov/apps/list/press/ca40_lewis/020700budget.html

- \$150 million in development and \$170 million over the budget request in procurement accounts to completely test, equip and field the first IBCT.
- \$500 million to equip a second IBCT.
- \$46 million to accelerate the effort to develop future combat vehicles.¹¹¹

Overall, the conference report allocated \$866 million over the budget request to fully fund one IBCT and equip a second in FY-2001, and to speed research and development of the future combat vehicle. The FY-2001 budget has been constructed on two fundamental tenets:

- The first is to continue to provide combat ready forces to support National Security and National Military Strategies by preserving their capabilities to win two near-simultaneous theater wars.
- The second tenet of this FY-2001 is the process of transforming the U.S. Army into a force that is strategically responsive and dominant at every point on the full spectrum of operations from a small-scale contingency to a major theaters war.¹¹²

In fact, this FY-2001 has become both one of ensuring the continued superiority of the U.S. Army as held in the past, and one devoted to changing the Army into a full spectrum force that is strategically responsive and dominant for the future. More importantly, the Congress by adopting the FY-2001 budget confirmed its strong support of the U.S. Army's transformation strategy. Regarding funding, General, Eric K. Shinseki, Chief of Staff of the U.S. Army, said:

.... we are pleased to tell you we are well on our way to transforming our Army. In the first year of Army transformation, efforts to win congressional support were successful. Congress provided the money to push forward objective force research and development, and Army transformation's impact from the outset

¹¹¹ Ibid., http://www.house.gov/apps/list/press/ca40_lewis/020700budget.html

¹¹² "The Army Budget FY-2001: President's Budget", Assistant Secretary of the Army Financial Management and Comptroller, <http://www.asafm.army.mil/budget/fybm/fy01/Greenbook/greenbook.pdf>

has been to uplift the Army's science and technology community.¹¹³

In summary, the U.S. Army, with strong support from the Congress and from President G.W. Bush's Administration, is willing to take advantage of auspicious conditions:

- Relative peace worldwide;
- Unrivalled economic prosperity without real evidence of declining;
- Overwhelming technological progress.

Because of these factors, FY-2001 could afford to maintain the process of transforming the U.S. Army force structure by providing sufficient funding for new combat vehicles, arms, organization design and development of military doctrine. Indeed, the U.S. Army should be very content and proud for now it is a more deployable, versatile and responsive full spectrum force by implementing two new combat "medium-weight" brigades.

¹¹³ Congressman Jerry Lewis, *Press Release*,
http://www.house.gov/apps/list/press/ca40_lewis/020700budget.html

V. THE U.S. ARMY UNDER THE TRANSFORMATION STRATEGY OF 1999

A. NECESSITIES FOR THE U.S. ARMY TRANSFORMATION OF 1999

The purpose of this chapter is to analyze the means of reforming the U.S. Army. Transforming the U.S. Army into a new combat structure will enhance strategic responsiveness with better theater agility and greater combat power. The Doctrine for Joint Operations lists the following "Principles of War,"¹¹⁴ which reflect Americans' "instinctive search for valid rules or guides"¹¹⁵:

- Objective;
- Offensive;
- Mass;
- Economy of Forces;
- Maneuver;
- Unity of Command;
- Security;
- Surprise;
- Simplicity.¹¹⁶

Indeed, when considering the transformation strategy for the U.S. Army, it is essential to recall the American principles of war because an obvious relationship exists between the principles of war and the basic doctrine, which shapes the entire structure of the U.S. Army. In addition, the increased role of the military in ad hoc peacekeeping operations has challenged the U.S. military's current organizational structure for the

¹¹⁴ The first list of the American "principles of war," in an attempt to make a beginning toward a unified military doctrine, was published under the War Department Training Regulations No.10-5 in 1921, Russel F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy*, Indiana University Press, 1973, p.213.

¹¹⁵ Marshall L. Falwell, "The Principles of War and the Solution of Military Problems," *Military Review*, 05.1955, p.62. op.cit. Robert S. Frost, "The Growing Imperative to Adopt "Flexibility" as an American Principle of War," 10.15, 1999, <http://carlisle-www.army.mil/usassi/ssipubs/pubs99/flexblty/flexblty.pdf>

¹¹⁶ *The U.S. Joint Staff, Doctrine for Joint Operations*, Joint Publication 3-0, Washington, DC: U.S. Government Printing Office, 02.01.1995, pp. A-1—A-3.

quick deployment of troops from the various services. Rapid technological advances and post-Cold War strategic uncertainty also complicate the U.S. military's organizational structure.¹¹⁷

Taken together, the demands of the strategic environment and the realities of the U.S. Army's current condition necessitate fundamental changes. With that understanding, the U.S. Army began to transform itself. The U.S. Army transformation was launched by the U.S. Army's leadership (represented by the Secretary of the Army Louis Caldera and Chief of Staff of the Army, General, Eric K. Shinseki) during the Association of the United States Army's Annual Meeting in Washington, D.C. in October 1999.¹¹⁸ This is the vision of how the U.S. Army should transform itself from a Cold War, industrial age Army into a 21st-century information age Army:

.... An Army that gives the American nation greater and more relevant capabilities to react to fast-changing world events—a lighter, more lethal, more deployable force with the mental and physical agility to be dominant at every point of the spectrum of operations.¹¹⁹

In order to become more deployable and maintain lethality, the U.S. Army has fielded a prototype brigade-size force that would use off-the-shelf systems and would initiate the new concepts for organizational design and training. In fact, the new strategy of the U.S. Army Transformation is designed to ensure that the U.S. Army achieves the

¹¹⁷ Steven Metz, William T. Johnsen, Douglas V. Johnson II, James O. Kievit, Douglas C. Lovelace, Jr, *The Future of American Landpower: Strategic Challenges for the Army of the 21st Century*, Strategic Studies Institute, 03.12.1996, Summary VIII-IX.

¹¹⁸ Press Conference Secretary of the Army, Louis Caldera and Chief of Staff of the U.S. Army, General, Eric K. Shinseki, Association of the United States Army, Washington, D.C. 10.12.1999, <http://www.fas.org/man/dod-101/army/unit/docs/r19991014ausapress.htm>

¹¹⁹ Chief of Staff of the U.S. Army, General, Eric K. Shinseki, "The Army Transformation: A Historic Opportunity," *Army Magazine*, http://www.ausa.org/armyzine/shinseki_sr_00.html

vision while maintaining the ability to conduct and to win battles over the course of the transformation.

The Secretary of the U.S. Army, Louis Caldera, and Chief of Staff of the Army, Eric K. Shinseki, unveiled a vision of a more strategically responsive U.S. Army saying, "Army transformation represents the strategic transition we will have to undergo to shed our Cold War designs, to prepare ourselves now for the crises and wars of the 21st century. It is also a test of our institutional agility and our heart as an Army."¹²⁰ Therefore, the U.S. Army is willing to create five interim brigades and to develop an interim force division structure in the active force.¹²¹

The newly organized force is built around a common unit design and combat systems that is C-130 aircraft deployable. This ultimate goal will allow the U.S. Army to lighten the force significantly without compromising combat capability:

First among these new challenges is the need for a much smaller force "footprint," characterized by fewer but more capable attacking troops and platforms supported by an even smaller logistics element.¹²²

In short, the main intent of this transformation plan is to field common equipment, across common organizations. This new medium-weight brigade will be able to operate across the full spectrum of military actions. In order to accomplish its goals, the U.S. Army must also reduce its logistical footprint. This means developing a systems approach

¹²⁰ Dennis Steele, "Army Transformation Begins Its Second Year," *Army Magazine*, 12.2000, <http://www.ansa.org/armymagazine>

¹²¹ Chief of Staff of the U.S. Army, General, Eric K. Shinseki, "The Army Transformation: A Historic Opportunity," *Army Magazine*, http://www.ansa.org/armymagazine/shinseki_sr_00.html

¹²² Colonel, Joseph Rodriguez, Director for the Transformation Axis, TRADOC (The U.S. Army Training and Doctrine Command), "Status of Brigade Combat Team Development at Fort Lewis and the Planned Performance Demonstration at Fort Knox," 12.16.1999, The Pentagon, Washington D.C., http://www.fas.org/man/dod-101/army/unit/docs/991216-briefing_tradoc_press.htm

to fielding platforms as well as revolutionizing the way the Army transports and sustains the force:

Look at one feature called deployability that means to be sustainable without a large logistical footprint. As an example, the heaviest part of an armored division is not the tanks and other armor vehicle. The heaviest part of an armored division is fuel. The second heaviest part of an armored division is the ammunition. The third heaviest part of an armored division is all the track vehicles. So if you can solve the fuel and ammo, if you can get the fuel and ammo rates down, then you can begin to achieve force effectiveness.¹²³

As a matter of fact, reducing the numbers of systems will reduce the numbers of repair parts needed. Greater fuel efficiencies will also decrease the total weight of deploying forces. Deployability will come through a smaller logistic footprint. Furthermore, it is necessary to point out that the models of the combat forces, such as a brigade-combat combined-arms team, has not been used previously. As a matter of fact, in the past, the U.S. built an arms-heavy division-based force for lethality, survivability and battlefield mobility to fight in Europe against the Warsaw Pact, and the U.S. Army still has all these qualities.

In accordance with the Defense Department's Bottom-Up Review (1995) of the nation's defense needs, the "warfighting organization for the U.S. Army of the future looks much like the force structures in the past and present. For instance, the options under considerations for a new Army division range from retaining today's basic structure while inserting new technologies that can be tailored to specific missions."¹²⁴ However, the U.S. Army doesn't have the means that allow it to reach any "hot-spot"

¹²³ Ibid., http://www.fas.org/man/dod-101/army/unit/docs/991216-briefing_tradoc_press.htm

¹²⁴ *Bottom-Up Review: Analysis of Key DoD Assumptions*, The United States General Accounting Office, 01.31.95, <http://www.fas.org/man/gao/ansi95056.htm>

quickly, or the abilities to be lethal, survivable, and self-sustained. As a result, the need to balance one group of qualities with others has become apparent.

B. THE CURRENT STATE OF THE U.S. ARMY

The U.S. Army's warfighting power today is assembled around two force characteristics—heavy forces, that are well equipped for war but difficult to deploy strategically; and light forces that can respond rapidly and are well suited for stability and support operations but lack staying power against heavy mechanized forces. Today, the U.S. Army continues to maintain four active corps headquarters, ten active divisions (1 air-assault, 1 airborne, 2 light, 6 heavy), and two active armored cavalry regiments.¹²⁵

<i>Light Forces</i> <i>(3 Divisions)</i>	<i>Medium Forces</i> <i>(1 Division)</i>	<i>Heavy Forces</i> <i>(6 Divisions)</i>
82nd Airborne Division	101st Air-assault Division	1st Armored Division
10th Light Division		1st Cavalry Division
25th Light Division		1st Inf. (M) Division
		2nd Inf. Division
		3rd Inf. (M) Division
		4th Inf. (M) Division

Table 1. Provides the Current Force Structure of the U.S. Army

Light forces—airborne, air assault, and light infantry divisions—are tailored for forcible-entry operations and for operations on restricted terrain, like mountains, jungles, and urban areas. Heavy forces—armored and mechanized divisions—are trained and equipped for operations against armies employing modern tanks and armored fighting

¹²⁵ John Gordon and Peter A. Wilson, *The Case for the Army 21st "Medium-Weight" Aero-Motorized Divisions: A Pathway to The Army of 2020*, Strategic Studies Institute, 05.27.1998, p.4.

vehicles. Light and heavy forces can operate independently or in combination, providing the mix of combat power needed for specific contingencies.¹²⁶

Today's problem is that if the U.S. has to conduct forced entry in a conflict situation, its options are the 18th Airborne Corps and the Marine Corps. However, the dilemma is that the U.S. can get the 18th Airborne Corps and the Marine Corps in quick, but then there is the "deployment gap."¹²⁷ It is a gap because the light forces can be deployed very quickly, but then it takes some time to close the heavy force in.

The operation Desert Storm clearly demonstrated this gap. The 82 Airborne Division, as a part of Eighteenth Airborne Corps, deployed very quickly, and then waited for the heavy force to arrive, playing the role of "Iraqi tank speed bumps." Therefore, the U.S. Army has taken that challenge in order to fulfill the gap between those two operational capabilities and to dominate in the full spectrum of military operations. The U.S. Army leadership's announced their intention to make the heavy force lighter, to make the light force more mobile, more lethal and more survivable. Above all, the objective is to erase the distinctions that exist today between heavy and light. However, it is crucial to call attention to some misunderstandings, which already exist among the military of the U.S. as well as its allies. Regarding this point, the Secretary of the U.S. Army, Louis Caldera, highlighted:

The biggest misconception is that this is only about swapping heavy forces in favor of medium forces and not understanding that this is not about weight but about capability. It is also about a smaller logistical footprint, more responsive formations, more lethality in that transformed force. Transformation is just one part

¹²⁶ William S. Cohen, *Annual Report to the President and Congress—1999*, <http://www.dtic.mil/execsec/adr1999/chap5.html>

¹²⁷ Colonel, Joseph Rodriguez, "Status of Brigade Combat Team Development at Fort Lewis and the Planned Performance Demonstration at Fort Knox," 12.16.1999, The Pentagon, Washington D.C., http://www.fas.org/man/dod-101/army/unit/docs/991216-briefing_tradoc_press.htm

of the vision that also includes an investment in our people, changes in our doctrine and the evolution of the use of information technology in warfighting.¹²⁸

C. THE U.S. ARMY TRANSFORMATION STRATEGY

The transformation plan sets the U.S. Army's course on a steady evolution toward the Objective Force while remaining trained and ready to meet its National Military Strategy requirements of its "nonnegotiable contract with the American people,"¹²⁹ to fight and win the nation's wars. In general, the Army's transformation strategy will progress along three major paths:

- The Legacy Force,
- The Interim Force,
- The Objective Force.¹³⁰

In order to have the time to develop Objective Force capabilities properly, the U.S. Army will maintain the Legacy Force, selected formations of key armored and aviation systems, to guarantee the warfighting readiness of the U.S. Army.

The first step in the Army transformation process began by establishing an initial force, which continues today toward full optimization until the requirements associated with small-scale contingencies (SSC) are fulfilled. It will also have the capability to be involved in stability and support operations (SSO), and with some expansion can conduct and fight in a major theater of war (MTW). The first two of these new brigades are

¹²⁸ Dennis Steele, "Secretary of the Army, Louis Caldera: the Army Transformation Sells Itself," *Army Magazine*, http://www.ausa.org/armyzine/caldera_sr_00.html

¹²⁹ Chief of Staff of the U.S. Army, General, Eric K. Shinseki, "The Army Transformation: A historic Opportunity," *Army Magazine*, http://www.ausa.org/armyzine/shinseki_sr_00.html

¹³⁰ Colonel, Joseph Rodriguez, "Status of Brigade Combat Team Development at Fort Lewis and the Planned Performance Demonstration at Fort Knox," 12.16.1999, The Pentagon, Washington D.C., http://www.fas.org/man/dod-101/army/unit/docs/991216-briefing_tradoc_press.htm

medium-weight brigade combat teams, or the Initial Brigade Combat Teams (IBCTs), at Fort Lewis, WA. They will be followed by a number of interim brigades.¹³¹

The IBCT, the first step toward the Interim Force, will accomplish two goals. First, it will give the U.S. Army a better capability for operational deployment to meet worldwide requirements. Second, the initial IBCT will validate an organizational and operational model for the Interim Force and will be the vanguard of the future Objective Force. The conversion of five brigades will complete the second step, which is labeled the Interim Force. Another issue is how these brigades operate within the current U.S. Army's divisions,

One assessment is the possibility of putting three of these brigades into an interim, what would be called an interim division.¹³²

The key path of the U.S. Army Transformation strategy leads to the Objective Force. The U.S. Army is going to make technology investments that after 10 to 20 years of development will result in new technologies that underpin the Objective Force design. In fact, transformation to the Objective Force will include the entire U.S. Army.¹³³

In summary, the geo-strategic environment will likely call for the rapid deployment of high performance combined arms forces over trans-oceanic distances. Moreover, in many small-scale contingencies, medium-weight combat units appear more versatile than pure light infantry units, especially if there is any expectation of intense local combat. Gen. Henry H. Shelton, Chairman of the Joint Chiefs of Staff, speaking about the military's role in peacekeeping and other non-combat missions, said that the

¹³¹ Chief of Staff of the U.S. Army, General, Eric K. Shinseki, "The Army Transformation: A Historic Opportunity," *Army Magazine*, http://www.ausa.org/armyzine/shinseki_sr_00.html

¹³² Colonel, Joseph Rodriguez, "Status of Brigade Combat Team Development at Fort Lewis and the Planned Performance Demonstration at Fort Knox," 12.16.1999, The Pentagon, Washington D.C., http://www.fas.org/man/dod-101/army/unit/docs/991216-briefing_tradoc_press.htm

¹³³ *Annual Report to the President and the Congress, 1999*, Part III: "Transformation the U.S. Armed Forces for the 21st Century," 05.03.1999, <http://www.pdgs.org.ar/Archivo/d000002e.htm>

U.S. must continue to prepare the military for a wide range of missions, "It is naïve to think that the military will become involved in only those areas that affect our vital national interests. Kosovo, indeed a good test of the effects that peacekeeping is having on the American military."¹³⁴ Indeed, the global security environment has changed; therefore, the U.S. Army has to be changed as well.

Today's U.S. Army is essentially a structure shaped with either very light or very heavy forces with few medium-weight units. Concerning this point, President G.W. Bush said:

Our military is still organized more for Cold War threats than for the challenges of a new century—for industrial age operations, rather than for information-age battles. America's forces in the next century must be agile, lethal, readily deployable, and require a minimum of logistical support.... That means giving U.S. troops the technological superiority they need to prevail.¹³⁵

Yet, historical experience suggests that technology alone does not bring about a revolution in military affairs. Increasingly lethal weapons lead to greater dispersion of combat forces and to increases in individual unit mobility. Organizational changes in directions that capitalize on human qualities benefit the armies with high quality manpower who encourage initiative and develop more flexible and adaptive fighting formations.¹³⁶ The U.S. Army is undergoing a radical transformation. The objective of this transformation is to erase the distinction between heavy and light forces. It will make light forces more lethal, survivable, and tactically mobile, and heavy forces more strategically deployable and agile with a reduced logistical footprint.

¹³⁴ Michael R. Gordon and Steven Erlanger, "Troops Say Kosovo Duty Sharpens Their Skills," *The New York Times*, 01.18.2001.

¹³⁵ D. W. Bush, "Address at New Mexico Veterans Memorial Park," Albuquerque, 05.31.2000.

¹³⁶ William Stewart, "Interaction of Firepower, Mobility, and Dispersion," *Military Review*, 1960: p.25-33.

During the early decades of the 21st Century, the Army of 2025 will differ from today's Army in two distinct ways. First, it will achieve unprecedented strategic and operational speed by exploiting information technologies to create a knowledge-based organization. Second, it will exhibit tremendous flexibility and physical agility through streamlined, seamlessly integrated organizations that use new tactics and procedures. The collective result will be a versatile, full spectrum, capabilities-based force that can decisively respond to any future global contingency.¹³⁷

In short, the U.S. Army is on the path of meeting tomorrow's security challenges by implementing a strategy that will transform it from a heavy, forward-deployed force to a lighter, more versatile, power projection force. As a result, one of the basic decisions that the U.S. Army has adopted in the last decade was to continue temporarily the existing organizational structure based on division's structure as a basis tactical level and simultaneously to modify and transform itself toward "Objective Forces of Twenty First Century," where medium-weight brigade-size units will be used either as a leading part of expeditionary forces or as a central combat component of future contingencies including military operations other than war. Finally, medium-weight brigades or Initial Brigade Combat Teams (IBCTs) will allow the U.S. Army to develop thoroughly the doctrine and concept of ground forces operations that have the strategic agility of current light forces and approach the combat power of current heavy forces.

¹³⁷ Robert H. Scales, Jr., "America's Army: Preparing for Tomorrow's Security Challenges," The U.S. Army War College, Strategic Studies Institute, 12.1998, <http://carlisle-www.army.mil/usassi/ssipubs/pubs98/amcaarmy/america.pdf>

VI. FIRST STEP—IBCT (FORT LEWIS, WA)

A. THE ROLE OF THE BRIGADE

As mentioned previously, the world geopolitical environment will continue to directly affect the U.S. military strategy. This challenge ranges from a conflict with a growing superpower or a hostile regional power; or against a less sophisticated, but no less dangerous, insurgent force. In support of the U.S. military strategy, the U.S. Army has to continue to deter aggression worldwide and if deterrence fails, the U.S. Army should be prepared to defeat any enemy across a wide range of threats. Moreover, the U.S. Army operations will be varied from aiding to foreign governments to full combat operations against well-armed hostile forces.

In accordance with Field Manual No 7-30 (FM 7-30), the primary mission of the brigade, a unit that controls two or more battalions, is to deploy on short notice and destroy, capture, or repel enemy forces, using maneuver and shock effect. A brigade's chief tactical responsibility is synchronizing the plans and actions of their subordinate units to accomplish a single task for the division or corps.¹³⁸ A brigade is organized to be capable of fighting armed conflicts in conventional and various operations other than war (OOTW), independently or as part of a joint or multinational headquarters in peacetime and conflict environments. In short, the U.S. military doctrine presents basic principles that guide the employment of the U.S. Army brigades.

¹³⁸ *Field Manual No. 7-30 (FM 7-30)*, Headquarters Department of the Army, Washington, DC, 10.03.1995, <http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/7-30/toc.htm>

Doctrinally, the infantry brigade is a critical element in the force structure of the U.S. Army because of its ability to operate both independently or as part of a division. Furthermore, a brigade may deploy as part of Joint Task Forces (JTF) with or without its traditional divisional headquarters. A brigade is able to integrate and coordinate different kinds of maneuver battalions, field artillery, combat air support, and engineer to accomplish its mission. In sum, a brigade provides the link between the division deep and close battle.¹³⁹

Considering the formation of the Initial Brigade Combat Team (IBCT) as a first step of the U.S. Army transformation strategy toward Objective Forces, it is necessary to look inside the organization, role and missions of two kinds of infantry brigades (maneuver and separate), which were recently laid down in the basis the U.S. Army's brigade structure.

In fact, maneuver brigades with their capability for self-support and independent action are considered the major combat units of all types of divisions. Maneuver brigades are extremely compatible for operating in a wide range of military actions. Each maneuver brigade normally controls from two- to five-attached maneuver battalions along with different kinds of combat support and combat service support units. Maneuver brigades usually operate as part of a division; however, they can also be organized as separate units.¹⁴⁰

¹³⁹ *Brigade*, Military Analysis Network, Data can be accessed at the following site:
<http://www.fas.org/man/dod-101/army/unit/brigade.htm>

¹⁴⁰ *Field Manual No. 7-30 (FM 7-30)*, Headquarters Department of the Army, Washington, DC, 10.03.1995, <http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/7-30/toc.htm>

Separate brigades can control up to five maneuver battalions. Separate brigades also have their own cavalry troop, engineer company, military intelligence company, military police platoon artillery battalion and support battalion. Additionally, field artillery battalions, aviation units, along with combat support and combat service support units may be attached to the brigade as required by the brigade's mission. Even though separate brigades normally conduct operations under corps command, separate brigades can conduct operations like divisional brigades. While separate brigades have a fixed organization and can be used to reinforce corps or divisions, division commanders establish the organization of their brigades and change their organizations if it is necessary to accomplish a mission.¹⁴¹

The FM 7-30 infantry brigade was assumed to be rapidly deployable rapidly, at a division or a corps level, with support units for conducting different kinds of combat operations against light enemy forces in any types of terrain, such as forests, jungles, mountains, and urban areas. Therefore, the infantry brigade can:

- Conduct operations in all operations other than war activities.
- Conduct small-unit operations.
- Conduct operations with armored or mechanized forces.
- Conduct operations with special operations forces.
- Participate in amphibious operations.
- Conduct air assault operations.
- Conduct airborne operations.¹⁴²

¹⁴¹ Ibid., <http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/7-30/toc.htm>

¹⁴² Ibid., <http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/7-30/toc.htm>

However, some limitations of the infantry brigade had become apparent when the new Army brigade's structure was under consideration. Those restrictions for the current type of the infantry brigade were and in fact are still included as follows:

- It does not have the firepower, mobility, or protection of armored and mechanized brigades.
- Maneuver battalions of those brigades are predominantly foot mobile.
- Infantry soldiers are especially vulnerable to enemy fires while soldiers are moving.¹⁴³

Indeed, the nature of warfare has changed because of technological advances in precision fires, enhanced situational awareness, near-real-time battle command, and the mobility and lethality of air and ground maneuvers in order to accomplish the mission with minimal casualties. Desert Storm was a great example of the real possibility of such a framework. However, remaining highly trained in the traditional way of war, infantry brigades must be prepared to adapt to a new framework for the twenty-first century. Therefore, the experience of the 3rd Brigade, 2nd Infantry Division, at Ft. Lewis, WA, as a working prototype of a new combat brigade team should be considered the first but an extremely important step for the strategy of the U.S. Army's transformation. Regarding this transition, Col. Joseph Rodriguez said in an interview:

.... For the near term, the reason we have gone to the Brigade Combat Team is the brigade is organized as a brigade combat team. The normal brigade in the U.S. Army today is not organized as a brigade combat team. They get mission-tailored and task organized when they go to combat, or when they go to train. But when they're in garrison, they are in garrison as a pure brigade. This brigade is a Brigade Combat Team. All the different combat

¹⁴³ *Brigade*, Military Analysis Network, Data can be accessed at the following site:
<http://www.fas.org/man/dod-101/army/unit/brigade.htm>

arms, combat support, and combat service support in the brigade, all these people rated by the colonel commanding the brigade.¹⁴⁴

B. THE KEY POINTS FROM THE NEW BRIGADE OPERATIONAL CONCEPT

The US Army is transforming the 3rd Brigade, 2nd Infantry Division, at Ft. Lewis WA.¹⁴⁵ This is the first of a projected six to eight IBCTs presently in the transformation process of medium-weight brigades to meet the full spectrum of combat scenarios. The planners started with the maneuver and separate infantry organization as the base, and added personnel, weapons and equipment to enhance mobility, lethality and force protection. As the U.S. Army Training and Doctrine Command (TRADOC) Deputy Commanding General for Transformation Maj. Gen James M. Dubik stressed:

We are not building a high-speed humanitarian assistance force. This is a combat force that can compel people in the full spectrum of combat; and is able to do this in joint and combined operations because there are no single-nation or single-service operations anymore. The training that you'll see out there is focused on combat capability. But it is a combat force that can operate in the actual environments, "a dirty environment," we are dealing with. And it has a powerful capability even in conventional combat.¹⁴⁶

The IBCT will be the first step in the Army's transformation strategy. The near term intent is to fill the requirement to execute responsive small-scale contingency (SSC) operations but it can also operate into stability and support operations (SASO) as well as major theater war (MTW) with some augmentation. The IBCT will be rapidly deployable

¹⁴⁴ Colonel, Joseph Rodriguez, "Status of Brigade Combat Team Development at Fort Lewis and the Planned Performance Demonstration at Fort Knox," 12.16.1999, The Pentagon, Washington D.C.

http://www.fas.org/man/dod-101/army/unit/docs/991216-briefing_tradoc_press.htm

¹⁴⁵ On 29 March 1995 the 3rd Brigade 2nd Infantry Division was reactivated at Fort Lewis Washington as part of I Corps, where today it contains the following Battalions, 1-23 Infantry, 1-32 Armor, 1-33 Armor, 1-37 Field Artillery, 168 Engineer, 296 Forward Support, and Charlie 5/5 Air Defense Artillery. On 18 May of 2000, the 3rd Brigade was again reorganized as the US Army's first initial brigade combat team by losing 1-33 Armor and gaining 1/14 Cav, 5-20 IN, 334th Signal Co. and the 18th EN Co., *Initial Brigade Combat Team*, <http://www.lewis.army.mil/transformation/>

¹⁴⁶ Scott Gourley, "The New Art of Combat," *Jane's Defense Weekly*, 10.11.2000, <http://jdw.janes.com/>

with the possibility of having the core elements of the brigade in theater, ready to fight, within 96 hours of lift-off.¹⁴⁷

As a matter of fact, the first two IBCT's organizational structures are much different from the Army's current brigade configuration. More importantly, this is an infantry-based force that relies upon a deliberate dismounted assault by combined arms units. Since this force will not initially have platform overmatch, its force effectiveness is based on the sum parts of the organization, training, doctrine and modern technology.

The organization of the brigade, which is a combination of combined arm battalions and other supporting units grouped under the command of a brigade headquarter, includes:

- The brigade headquarters and headquarters company (HHC);
- The military intelligence company (MIC);
- The signal company (SC);
- Three combined arms battalions;
 - The combined arm battalion HHC includes a scout platoon and 120mm mortar platoon mounted in light armored vehicles (LAVs),¹⁴⁸ ten-man sniper squad equipped with heavy and medium caliber;
 - Three combined arms companies consisting of three infantry platoons (about 45 men each) in LAVs, one mobile gun system (MGS) platoon also in LAVs and one section each of 81mm and 60mm mortars. Each company has also a three-man sniper team;

¹⁴⁷ Chief of Staff of the U.S. Army, General, Eric K. Shinseki, "The Army Transformation: A Historic Opportunity," *Army Magazine*, http://www.ausa.org/armyzine/shinseki_sr_00.html

¹⁴⁸ On the 17th of November, 2000, LTG Hill, Commander of 1ST Corps at Fort Lewis, announced to the 3rd Brigade IBCT that the General Dynamics Corp. and GM Canada would receive the contract for building the LAV 3, the vehicle of choice, *Initial Brigade Combat Team*, <http://www.lewis.army.mil/transformation/>

- Each combined arm platoon has three nine-man squads with a “Javelin” command launch unit (CLU). Each combined arm squad has a sniper and a “Javelin” anti-tank system;
- Every weapon squad has two three-man M-240B machine gun teams and two Javelin gunners with CLUs;
- The antitank company consists of “TOW-2-Bravo” and possibly migrating to the line of sight anti-tank weapon system (LOSAT);
- The recon, surveillance, and target acquisition (RSTA) squadron consists of three recon troops and one surveillance troop; The RSTA unit includes a multi-sensor troop of four unmanned air vehicles, ground and remote battlefield sensor systems (“Prophet II”—electronic intelligence-gathering system, electronic warfare sensors and ground surveillance radars); Each recon troop has three platoons of four LAVs per platoon. Each squad has a three-man scout team and is capable of both mounted and dismounted operations (“The idea is that the brigade will never be surprised,” explained Lieutenant Colonel Dana Pittard, commander of 3rd Brigade’s 492-soldier RSTA formation;¹⁴⁹)
- The surveillance troop consists of a unmanned aerial vehicle (UAV) platoon with four UAVs and a ground sensor platoon;
- The engineer company of three combat engineer/mobility platoons mounted in LAVs and a bridging capability; (an engineer company, which focuses on mobility. Obviously, if this brigade is stopped or forced into a static situation, it is very vulnerable to artillery since they are LAVs;)

¹⁴⁹ *Initial Brigade Combat Team*, Data can be accessed at the following site:
<http://www.benning.army.mil/BCTTF/>

- The field artillery currently equipped with M198 155mm towed howitzers with the possibility of introducing High-Mobility Artillery Rocket System (HMARS), which is the wheeled version of the multiple launched rocket system MLARS;
- The support battalion provide minimal essential logistical for the brigade;
- The total troops in the brigade will number around 3,000 to 3,500 personnel.¹⁵⁰

Overall, the IBCT's Operational Concept has been crafted with an underlying military operation in urban-terrain combat capability, and is able to extend those combat operations across the entire spectrum of conflict. It has to be a credible and lethal force, which can deploy rapidly and sustain itself without a large logistic footprint. In the future, each unit will be outfitted with all the latest kinds of point-and-shoot technologies connected through their vehicles to all of the other combat multipliers in the brigade to push more combat power down to the point of battle, down through the Tactical Internet ("Ruggedised" Fieldworks 2000 computer platform), which increases the combat power available to the platoon leaders.¹⁵¹

¹⁵⁰ *Initial Brigade Combat Team*, Data can be accessed at the following site:
<http://www.lewis.army.mil/transformation/>

¹⁵¹ *Brigade*, Military Analysis Network, Data can be accessed at the following site:
<http://www.fas.org/man/dod-101/army/unit/brigade.htm>

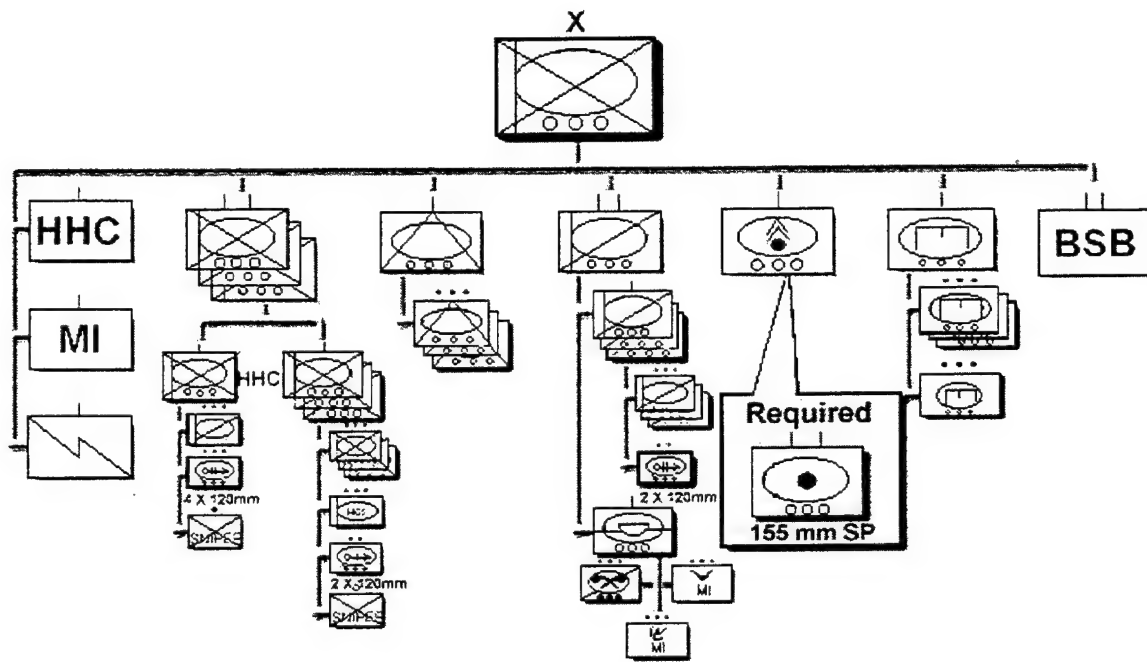


Figure 1. Provides an Example of the Initial Brigade Combat Team (IBCT)
 Organization, <http://www.benning.army.mil/BCTTF/>

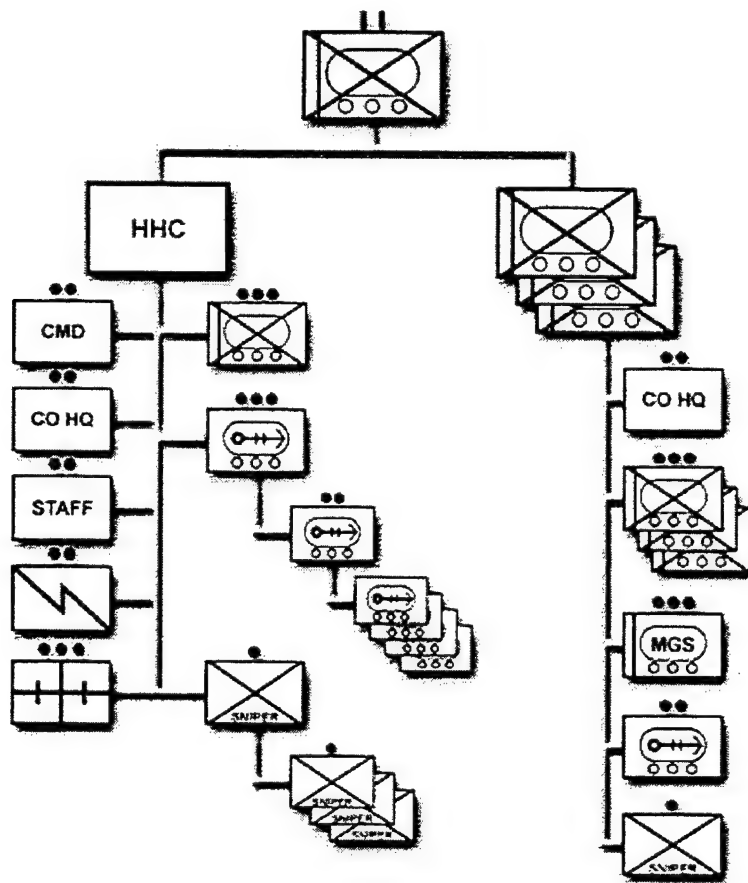


Figure 2. Provides an Example of a Combined Arms Battalion Organization of the Initial Brigade Combat Team (IBCT), <http://www.benning.army.mil/BCTTF/>

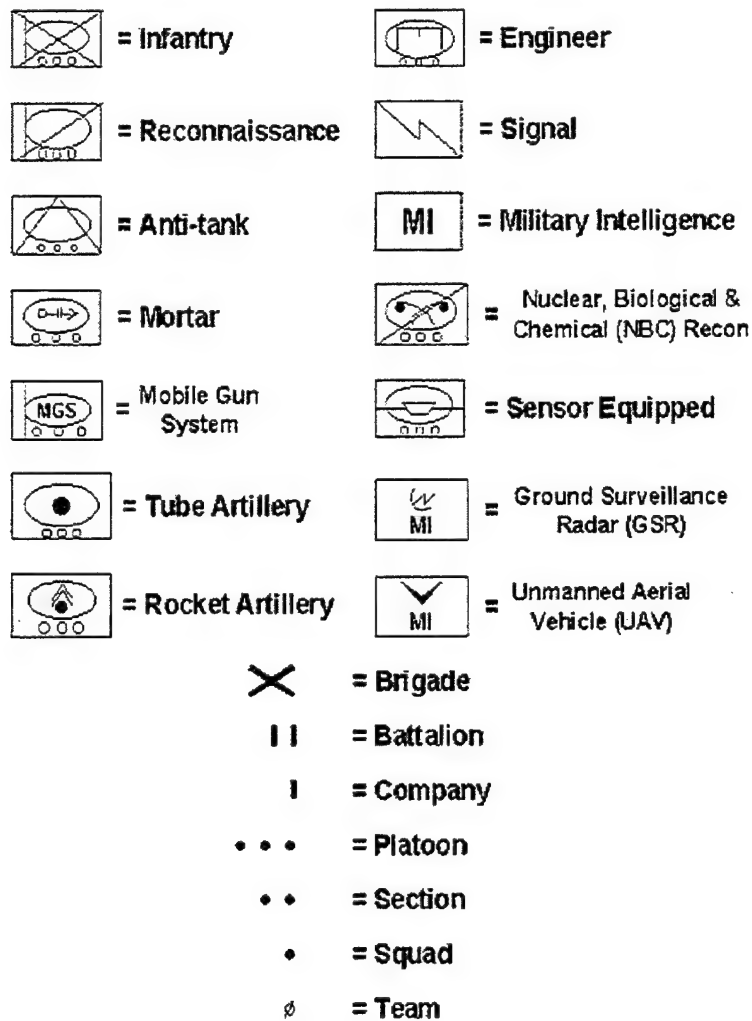


Figure 3. Provides Symbology of the Initial Brigade Combat Team (IBCT)

Organization, <http://www.benning.army.mil/BCTTF/>

Indeed, today's requirements for the U.S. Army formed new roles and missions for the Initial Brigade Combat Team, which in turn shaped its own organizational structure. The IBCT is a rapidly deployable combat brigade; therefore, the brigade combat team's missions are:

- **In Small-Scale Contingencies (SSC):** it deploys rapidly, offers deterrence, contains the situation or shapes the situation and resolves that problem.
- **In Stability and Support Operations (SSO):** a guarantor of the peace and protects the peacekeeping forces and separate belligerents.
- **In a Major Theater of War (MTW):** it can perform several functions. It can conduct a mission supporting attack; it can also participate in the division's main attack with some augmentation and conducts economy of force, recon, screening, and limited guarding actions as well.

Moreover, emphasizing the two core qualities of the brigade is necessary:

- The first core is high mobility at all levels, strategic, operational and tactical. The C-17 and the C-5 are used as the primary means for deploying this strategically. However, the key quality is that everything in this brigade has to fit in a C-130 aircraft. The major requirement is, "If it does not fit into a C-130, it does not go into the brigade."¹⁵²
- The second core quality is achieving decisive combat action through deliberate dismounted infantry assault because the brigade has great situational awareness (having of RSTA). In other words, they can find the place where they want to fight, and then the infantry can dismount and conduct a dismounted assault of the any necessary objective. Moreover, this brigade will be optimized for urban and complex terrain (urban and

¹⁵² "The Transformation of the U.S. Army, Initial Brigade Combat Team," Data can be accessed at the following site: <http://www.benning.army.mil/BCTTF/>, <http://www.lewis.army.mil/IBCT/>

complex terrain are the military terms for fighting in the cities, or populated areas. Complex terrain consists of all other terrain than open and rolling, such as mountains, jungles, very wooded areas. Bosnia is an example of a complex terrain).

Overall, the key characteristics of the organizational and operational concept of the Interim Brigade Combat Team are as follows:

- To be full-spectrum capable, so it can be optimized for small-scale contingencies (SSC) but it can also do stability and support operations, and it contribute to the major theater war (MTW) fight.
- Rapidly deployable, which means 96 hours from wheels-up of the first plane. IBCT should be combat-capable on arrival.
- Freedom of maneuver with high tactical mobility and situational understanding provided by the reconnaissance, surveillance and target acquisition squadron (RSTA) to the brigade.
- IBCT can achieve decisive action by deliberate dismounted infantry assault, which is the core quality, the cornerstone of this brigade. Unlike the current heavy force, which often fights mounted (Desert Storm is an example of this tactic) these three combined arm battalions will fight dismounted; however, with a lot of weapons systems in support.
- These brigades will be equipped with commercial and government equipment that exists today.
- IBCT will be best used in complex and urban terrain. Since the end of Desert Storm, potential adversaries will probably be reluctant to engage the U.S. Army in the open terrain and will engage units in complex and urban terrain.
- Next intent with IBCT is to minimize the logistical and support footprint.
- IBCT operates under a division, corps headquarters.

In summary, the transformation of the Initial Brigade Combat Teams is the first phase of the Army's three-phase strategy for transforming the current force. "The transformation of these two brigades at Fort Lewis, using current off-the-shelf technology, will give us an interim capability as we move toward our long-term goal of the Objective Force" said the Army Chief of Staff General, Eric K. Shinseki.¹⁵³ The IBCTs will also serve to identify rapidly any necessary changes in doctrine, organization, equipment, training, and leader development required for the second phase, the Interim Force.

The Interim Force will consist of the two IBCTs. The first IBCT to transform to the new design, the 3rd Brigade, 2nd Infantry Division, is scheduled to achieve Initial Operating Capability (IOC), the point at which the Army certifies the unit is capable of accomplishing brigade-level operations by December 2001.

The second IBCT, the 1st Brigade, 25th Infantry Division, will achieve IOC by December 2002.¹⁵⁴ The first two IBCTs will feature significantly different organizations from the Army's current brigade configuration. Another significant change is that the companies of the infantry battalions will be combined arms teams, consisting primarily of medium armored gun systems, infantry, and mortars.

The Interim Force will be fielded primarily with off-the-shelf equipment and technological insertions and will provide immediate deployability and breakthrough maneuver capabilities to bridge the current gap between the Army's heavy and light forces until technology developments make fielding of the Objective Force possible.

¹⁵³ Chief of Staff of the U.S. Army, General, Eric K. Shinseki, "The Army Transformation: A Historic Opportunity," *Army Magazine*, http://www.ausa.org/armyzine/shinseki_sr_00.html

¹⁵⁴ "The Transformation of the U.S. Army, Initial Brigade Combat Team," Data can be accessed at the following site: <http://www.benning.army.mil/BCTTF/>, <http://www.lewis.army.mil/IBCT/>

The final phase of the Transformation, the Objective Force, will begin with fielding of "Future Combat Systems," currently being studied by the Army. The IBCT organization will enable the brigades to conduct operations across the full spectrum—from small-scale contingencies, such as Bosnia and Kosovo, to major theaters of war.

"We do not know yet the exact shape of our future military," President Bush said, "but we know the direction we must begin to travel. On land, our heavy forces will be lighter. Our light forces will be more lethal. All will be easier to deploy and to sustain."¹⁵⁵

¹⁵⁵ David E. Sanger, "Bush Details Plan to Focus Military on New Weaponry," *New York Times*, 02.14.01.

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VII. THE INDEPENDENCE OF UKRAINE AND THE MILITARY ISSUE

A. THE SOVIET MILITARY DOCTRINE AND COMBINED ARMES CONCEPT

This chapter explores the relationship between the Ukrainian military doctrine and the development of the Army of Ukraine after the declaration of its independence in 1991. However, in order to understand the essence of the process of forming the Army of Ukraine (inherited from the former Soviet Army), it is necessary to briefly examine the essentials of Soviet Military Doctrine and in particular the Soviet Combined Arms Concept (CAC).¹⁵⁶

During the entire history of the Soviet Union, political and military leadership were linked through military strategy in preparing the nation for war. Taking the political leadership's instructions and the military doctrine, the Soviet military organized the strategic idea; planned how to deploy the armed forces, conducted and prepared the armed forces for war, and practiced controlling them during war. The political basis of military strategy directly influenced the military. Additionally, the specific relationship between military strategy and doctrine showed that any change in the theoretical base of one caused change in the other. The Soviet strategy provided the unity between military doctrine, and operational art. How military doctrine viewed the

¹⁵⁶ Colonel Authur F. Lykke, Jr., *Military Strategy: Theory and Application*, The U.S. Army War College, 1989, Chapter Five, Marshal V.D. Sokolovsky, "Military Strategy: Soviet Doctrine and Concepts," pp.401-413, Marshal N.V. Ogarkov, "Military Strategy," pp.414-421, C.N. Donnelly, "The Development of Soviet Military Doctrine," pp.422-428.

characteristics of future war also guided military strategy. Simultaneously, strategy affected the formulation and perfection of military doctrine.¹⁵⁷

More importantly, previous Soviet political ideology and military doctrine stressed the inevitability of a clash with NATO, and the importance of the initial period of war marked by specific actions, such as mobilization, concentration, deployment of forces, and the conversion of national economies from peacetime to wartime. Under that doctrine, the primary tasks of the Soviet military were to cover the deployment of the main forces and disrupt the mobilization efforts of the enemy.¹⁵⁸

In fact, during almost the entire history of the Soviet Union, its military doctrine stressed the offense. The Soviet Army believed that they could defeat the West in a mobilization race and; therefore, the Soviet Army could mass the means of warfare to achieve the aims of the initial period of war, which was important in determining the subsequent course of the war. For this reason, their European strategy stressed neutralizing NATO's nuclear capability to force a decision in the initial period.¹⁵⁹ The Soviet perception was that the greater degree of surprise they could achieve, the greater NATO's need for space and time to recover from the strategic situation in their favor. The Soviet military leadership believed that the initial period of a war defined its course and outcome.¹⁶⁰ Under those circumstances, the Soviet Combined Arms Concept (CAC)

¹⁵⁷ The Encyclopedia Britannica, *Soviet Union*, Chapter 17, "Military Doctrine and Strategic Concerns," http://search.britannica.com/frm_redir.jsp?query=soviet+combined+arms+concept&redir=http://lcweb2.loc.gov/frd/cs/sutoc.html

¹⁵⁸ *The Soviet/Warsaw Pact Ground Forces Threat to Europe*, Chapter 4, <http://www.wws.princeton.edu/cgi-bin/byteserv.prl/~ota/disk2/1987/8718/871806.PDF>

¹⁵⁹ Jonathan Haslam, *The Soviet Union and The Politics of Nuclear Weapons in Europe in 1969-1987*, "The Soviet Reaction to Changes in NATO Strategic Doctrine," Cornell University Press, 1990, pp.29-30.

¹⁶⁰ Edward A. Corcoran, "Perestroika and the Soviet Military: Implication for the U.S. Policy," <http://www.cato.org/pubs/pas/pa133.html>, and Vojtech Mastny, "Secret Plan for Nuclear War in Europe, Warsaw Pact plan aimed at taking Lyon in Nine days," *Press release*: 05.23.2000.

became the theoretical basis of Soviet military doctrine. The Soviet CAC was not merely cross-attachment or cross-reinforcement of units as in the United States. The Soviet Army meant much more by CAC than the task organization for combat.¹⁶¹

The CAC was an interacting process among the elements of the Soviet armed forces, which produced "joint effort ... on the basis of their close and uninterrupted interaction and the fullest exploitation of their capabilities."¹⁶² Moreover, the Soviet CAC simultaneously confronted its opponents with a variety of weapons systems of widely differing capabilities. The dynamic nature of Soviet CAC placed great emphasis on timing, tempo, depth of attacking forces, densities of weapons, along with relationships among forces and troop control (command and control in the U.S. Army's term).¹⁶³ For a better understanding of the Soviet CAC, one should consider the Gulf War (1990-1991), when the Iraqi Army implemented the CAC, although unprofessionally, yet without decisive or effective result. General Norman Schwarzkopf, recalled:

We knew that the Iraqis were students of the Soviets; the Soviets have what they call "a strategic pause." They accomplish one phase of their operation, they then pause there, they refuel, they re-arm, they re-equip, they replace the men that they have lost and then they rest, and after this strategic pause, they then carry on to the next phase of their offensive. That was their doctrine at that time. It was highly likely that they were going through a strategic pause ready to carry out the next phase.¹⁶⁴

¹⁶¹ Wayne A. Downing, "Firepower, Attrition, Maneuver – the U.S. Army Operations Doctrine: a Challenge for the 1980s and Beyond," *Military Review*, January-February 1997, and James Sterrett, "A Report on Soviet Tactics," <http://members.tripod.com/~m557HQ/rsnoob1.html>

¹⁶² Ibid., <http://members.tripod.com/~m557HQ/rsnoob1.html>

¹⁶³ Lieutenant Colonel Robert G. Walker, *Through the Looking Glass: An Analysis of Soviet Combined-Arms*, Air War College Research Report, Maxwell Air Force Base, Ala., 03.1980, p.6.

¹⁶⁴ General Norman Schwarzkopf, Commander-in-Chief, Central Command, "The Operation Desert Storm," <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/schwarzkopf/1.html>

In fact, the Soviet CAC was not precisely the classic German "blitzkrieg," which stressed fluid, flexible and highly independent operations at all echelons.¹⁶⁵ The Soviet CAC was disciplined, very rigid and explicitly formatted, even dogmatic in nature, and authoritatively embraced all elements of the Soviet Army.¹⁶⁶

As an operational method, the CAC addressed how the Soviet Army intended to fight. Fire, assault and maneuver characterized the Soviet CAC. Overwhelming fire support had been a keystone of the Soviet offensive operations in the Great Patriotic War and continued to be a major goal of the Soviet Army. Capitalizing on the shock effect of firepower and movement, Soviet attacks were envisaged as overwhelming, in great depth and unceasing; however, the purpose of the entire operation was maneuver.¹⁶⁷ In its essence, the Soviet CAC required:

- Maintenance of momentum and freedom of maneuver along multiple axes of advance.
- Maximum rates of advance to prevent effective defense in depth.
- A high degree of control by the central directing headquarters and close coordination among enemy elements.
- Close timing of the multi-echeloned attacking forces to achieve the synergistic effect of tempo of operations.¹⁶⁸

Overall, if the Soviet Army applied the its CAC in reality, it would present an extremely formidable enemy; however, like all operational methods, the Soviet CAC had some weaknesses.

¹⁶⁵ Peter Paret, Gordon A. Craig and Felix Gilbert, *Makers of Modern Strategy, from Machiavelli to Nuclear Age: German Strategy in the Age of Machine Warfare, 1914—1945*, Princeton University Press, 1986, p.584.

¹⁶⁶ The Encyclopedia Britannica, *Soviet Union*, Chapter 17, "Military Doctrine and Strategic Concerns," http://search.britannica.com/frm_redir.jsp?query=soviet+combined+arms+concept&redir=http://lcweb2.loc.gov/frd/cs/sutoc.html

¹⁶⁷ Steven L. Canby, "The Soviet Method for Armored Warfare: Rigid or Flexible?" 10.1979, pp. 1-6.

¹⁶⁸ Colonel Authur F. Lykke, Jr., *Military Strategy: Theory and Application*, Chapter Five, C.N. Donnelly, "The Development of Soviet Military Doctrine," The U.S. Army War College, 1989, pp.422-428.

The extremely dogmatic and rigid application of the doctrine at the operational level discouraged a decentralized execution for maneuver warfare and created conditions that threatened the essence of the Soviet CAC.¹⁶⁹ The centralized direction of the CAC by the Soviet General Staff demanded reliable and effective command, control and communications throughout operations, which would be one of the greatest problems for both sides on either a nuclear or conventional European battlefield. In addition, Soviet commanders had been conditioned to conduct all operations against a backdrop of overwhelming fire superiority, especially artillery. Therefore, conditions, which degraded or denied this advantage, would have a significant effect on the Soviet attack doctrine and on the actions of the tactical commanders.¹⁷⁰

Finally, the entire Soviet concept was based on tempo and timing among elements. Unforeseen events, which impeded the highly prized timing among cooperating units or the tempo of attacks, would have a major negative effect on the operations.¹⁷¹ Overall, some weaknesses of the Soviet CAC discussed above appear to be a significant shortcoming in the Soviet strategy. Indeed, war is subject to friction and uncertainty more so than any other form of human endeavor; therefore combat must have a certain degree of flexibility.¹⁷²

In sum, military doctrine evolution in the former Soviet Union represented an amalgam of many factors. The effect of the international political environment and an

¹⁶⁹ Kenneth R. Whiting, *Soviet Theater Doctrine and Strategy*, Air War College Associates Program, Maxwell Air Force Base, Ala., 04.1977, p.11.

¹⁷⁰ John Erickson, "Trends in Soviet Combined-Arms Concept," *Strategic Review*, 1977, pp. 42, 51.

¹⁷¹ Colonel Authur F. Lykke, Jr., *Military Strategy: Theory and Application*, Chapter Five, Marshal V.D. Sokolovsky, "Military Strategy: Soviet Doctrine and Concepts," The U.S. Army War College, 1989, pp.401-413, Marshal N.V. Ogarkov, *Military Strategy*, pp.414-421.

¹⁷² Carl Von Clausewitz, *On War*, Edited and translated by Michael Howard and Peter Paret, Princeton, NJ: Princeton University Press, 1976, pp.119-121.

assessment of the probability of war from the political component of doctrine. The evolution of Soviet military doctrine reflected foreign doctrines, especially that of the German "blitzkrieg." Past Soviet experience taken, especially from the Great Patriotic War during 1941-1945, formed the Soviet perspective of war. Internal political, economic, and social constraints, as well as the nature of Soviet decision making fully supervised by the Communist Party, greatly affected the nature of doctrine. Technological innovation also had a key role. Therefore, the Soviet military doctrine arose from the interaction of these often-conflicting factors.

B. THE SOVIET ARMY LEGACY

After the breakup of the Soviet Union and the proclamation of Ukraine's independence in 1991, in many ways, the Ukrainian military was facing difficult problems including the issue with its new military doctrine. The speed of the Soviet Union's breakup left its Armed Forces practically intact where they were deployed. Ukraine as the former republic on the western frontier inherited first-class force packages, which were part of the second strategic echelon of the former western and southwestern theaters of operation of the Warsaw Pact.

On the ground, Ukraine gained control over five armies, one army corps, eighteen divisions (twelve motorized, four tank, and two airborne), three airborne brigades, three artillery divisions, and a host of combat support and combat service support units. It also inherited four air armies with assets that gave Ukraine the third largest air force in the world, including an inventory of long range bombers, transports, strike aircraft, reconnaissance and electronic warfare planes, tactical and air defense fighters, and training aircraft. The air defense contingent consisted of one air defense army and three air corps.¹⁷³

¹⁷³ Stephen Olynyk, "Ukraine as a Post-Cold War Military Power," *JFQ*, 1997, p.88.

Under those circumstances, the Armed Forces of Ukraine possessed one of the biggest parts of the huge Soviet war machine, equipped with nuclear weapons and comparatively modern conventional weapons, the forces totaled 780,000 personnel, 6,500 tanks, more than 7,000 armored vehicles, up to 1,500 combat aircraft, more than 350 ships and support vessels, 1,272 strategic nuclear warheads for ballistic carrier-missiles and more than 2,500 tactical nuclear weapons¹⁷⁴; however, Ukraine got this military power without a clear understanding of the Armed Forces' roles and missions, in other words without a doctrine that reflected a new posture of Ukraine in the European and the world security system as a whole. Therefore, Ukraine certainly needed to have its own military doctrine as soon as possible because lacking a unified military doctrine would give each branch of the armed forces a chance to develop its own doctrine. In addition, from the beginning, the new Ukraine rejected the idea of being one of the world's military superpowers, decided to disarm all nuclear weapons and declared itself as a neutral, non-block nation. Additionally, in response to economic collapse, Ukraine began drastically to reduce the size of its armed forces. All these factors together had their strong specific impact on the process of defining the military doctrine and reforming the force structure of the Ukrainian Armed Forces.¹⁷⁵ David Chu, while discussing the reformation of the U.S. Army, made an interesting observation, which is also valid for the Ukrainian Army:

.... All these force structure templates represent roughly linear reductions in the force structure from the Cold War pattern. It is not surprising that our first post-Cold War structure would be a linear extrapolation from the Cold War structure. We know the

¹⁷⁴ The State Program of the Ukrainian Armed Forces Reform and Development Until 2005, http://www.mil.gov.ua/eng/derg_prog/index.htm

¹⁷⁵ Serhiy Zgurets, "Uniform a Size too Large: It will Fit the Ukrainian Army Five Years Later," *The Day*, <http://www.day.kiev.ua/DIGEST/2000/019/1-page/1p5.htm>

Cold War structure and are comfortable with it—we know how to manage and operate that structure.¹⁷⁶

In accordance with the Soviet Military Encyclopedia, a brigade was considered a tactical formation in the armed forces, which in terms of effective combat strength was smaller than a division. In the ground forces a brigade usually consisted of several infantry battalions (more rarely regiments), artillery battalions of the basic branches of troops, and subunits of special troops and the rear services.

In the history of the Soviet Army, the largest number of brigades of active armies and the reserves of the Supreme High Headquarters existed during the time of the Great Patriotic War, especially in early 1943. In the postwar period establishing, specializing and improving the brigades continued in the Soviet Armed Forces. At the same time a number of brigades (rifle, motorized rifle, tank, and others) were abolished.¹⁷⁷

As a matter of fact, the brigade-size structure, in particular brigades in the ground forces, was never considered as a basic ground forces structure either at the tactical or operational levels. Mostly, various types of Soviet Army's brigades were either under the direct control of the senior command of an army's (corps) headquarters and higher and as a rule brigades were intended to conduct some special tasks, such as reconnaissance, and sabotage, as well as air-assault and logistical missions. The "backbone" of the Soviet Army was indeed a regiment for the tactical operations and a division for the operational level. The Army of Ukraine merely inherited a similar organizational structure with specifically designed roles and missions without any considerable changes. Currently, the Army of Ukraine does not have any actual experience of deploying or possessing an army

¹⁷⁶ David S.C. Chu, *The American Military's Response to a Changing World Order: What Does It Imply for Manpower Requirements?* First Brassey's Printing 1996, Washington, p.280.

¹⁷⁷ The Soviet Military Encyclopedia, Volume 1: A-F, Westview Press, Inc. 1993, pp.199-200.

based on the brigade-size units. Hence, the Ukrainian military and the civilian leadership decided to begin the process of reforming its Army to attain modern standards based on rapid deployability, lethality, agility and affordability. However, even though the medium-weight brigade-size combat force structure can provide all these features, creating this structure is quite a challenge for the Ukrainian Army.

Therefore, in order not to “invent the wheel again” the Ukrainian Army must take a vigilant look at the U.S. Army’s two-year experience, or at least evaluate some key elements of the U.S. Army’s transformation strategy. These elements include: the common strategy, the multi-stage approach, some key components from the organizational structure of the Initial Brigade Combat Team (IBCT), such as the structure of the recon, surveillance, and target acquisition squadron (RSTA), which would be suitable for an Ukrainian brigade. Finally, special attention should be given to the IBCT’s Operational Concept that has been crafted with underlying military operations in urban terrain and combat capabilities across the entire spectrum of conflicts.

Moreover, the Ukrainian military leadership must adjust its policy to make productive relationships with all branches of the state power, emphasizing public support and the support from the legislative and executive powers. Hence, the critical point of reforming the Army of Ukraine in the light of democratic transformations is the issue of civilian control over the military and the relationship between political and military leaders. Additionally, for Ukraine, the current and painful lack of funds should not simply break down the natural tendency of its Army to develop itself. Similarly to the U.S. Army, the Army of Ukraine is enjoying a period of peace in which to transform itself into

a new Army based on modern doctrine and force structure, where medium-weight brigades would be the “backbone” of the ground forces.

Regarding the issue of developing new military doctrine related to the present conditions, the requirements for the basic parameters of the Army should be clearly defined and coordinated with the political objects and capabilities of Ukraine. Obviously, the Army should not be excessively strong, as it frightens neighbors and provokes counter-action; and the Army should not be too weak, as it threatens the state’s security; and the Army should not be too expensive, as it drains the economy. Hence, balance should be maintained. Finally, it is not strength, or only strength, that is important. Yugoslavia and Iraq had rather strong and well-equipped armies; however, they could not effectively oppose a serious enemy possessing technological, organizational and doctrinal superiority. Therefore the new military doctrine has to form a template for the Ukrainian Armed Forces structure based on the probable nature of future war as well as valid political objectives. As a result, a new military doctrine must at least identify:

- First: the basis of the Ukrainian Armed Forces, in other words, the priority of developing the land or sea or air-based services.
- Second: the basis of defense, in other words, the priority of developing the rapidly deployable combined arms units, or maintaining heavy-arms division-based formations in the name of cost-efficiency. Therefore, the answer to the question “Is it better to have five or six divisions on paper or

five or six efficient brigades, plus an effective reservist training system?"

has become one of the first priorities of the Ukrainian Army's reforms.¹⁷⁸

Above all, the Ukraine's political, and economic reality internal turmoil is obstacles to implementing the doctrine. In fact, social and economical complexity in Ukraine along with some other currently pressing problems preoccupy the Ukrainian military: however, force modernization, structure reformation, training and tactics, and other mission-related concerns are subjects for day-to-day discussions for the Ukrainian military.

Obviously, Ukraine, a country of 50 million people, almost the size of France, and rich in natural resources, could be destined to play a central role in the new geopolitical environment of eastern and central Europe. Untangling the mass of problems related to the Ukraine's Armed Forces, including reforming its organizational structure, would augment the nation's prestige and well-being. Transforming, the Army of Ukraine from a heavy-arms division-based formations into rapidly deployable, combat-ready, cost-effective medium-weight brigade-size units is clearly the appropriate method of remediating this state of affairs.

¹⁷⁸ Oleksiy Havrylenko, "Does Ukraine Need a New Military Doctrine?" *Zerkalo Nedeli*, No.23(244), 07.12.1999, <http://www.zerkalo-nedeli.com/>

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VIII. UKRAINE AND THE NEW WORLD ORDER

A. THE INTERNATIONAL AND EXTERNAL DIMENSIONS

The last decade of the 20th century witnessed radical changes in the European political and geographic landscape, resulting in the disintegration of the bipolar European security system formed during the Cold War. A number of newly emerging democracies, with Ukraine among them, have appeared in Europe. For many reasons, these countries had been deprived of their own statehood and ability to defend their national interests. Regarding Ukraine, its national security was identified and assessed by the 1997 Concept of the National Security of Ukraine. In accordance with that Concept, national interests and objectives of state security policy include:

- Elevating living standards;
- Improving social security;
- Reforming the national economy;
- Enhancing the efficiency of government structures;
- Strengthening the civil society;
- Fighting corruption;
- Protecting national resources.¹⁷⁹

With respect to these interests, a feature of independent Ukraine became the principle of non-alignment or neutrality. The pledge of constant neutrality, as expressed in the 1990 Declaration of State Sovereignty, was also reaffirmed by the early Military Doctrine adopted in 1993. An important distinction was already introduced at that early stage: "The commitment to neutrality and non-alignment must not prevent Ukraine from

¹⁷⁹ *The Concept of the National Security of Ukraine*, Resolution of the Verkhovna Rada, 3/97, 01.16.1997, The National Institute for Strategy Studies <http://www.niss.gov.ua/liga>

a comprehensive participation in the all-European security architecture”¹⁸⁰ including the cooperation in reforming the Armed Forces of Ukraine toward standards of modern warfare. However, its geostrategic position between the Western world lead by NATO, and Russia’s sphere of influence has always been the common denominator of Ukraine’s struggling political forces.¹⁸¹ Because of that, the reorganization and development of its Armed Forces has become one of the basic elements of statehood for Ukraine. This target is considered to be rather difficult because Ukraine is a relatively young democracy and consequently it does not have experience and traditions in the sphere of the national defense engineering. Today, the Ukrainian society, as well as its Armed Forces, is at a stage of social transformation from a totalitarian communist regime to a democracy. Ukraine experiences these transformational processes not only socially, but also economically. This transformation complicates on the process of the Armed Forces reformation. The economic crisis, which plagues the country, will have an effect on developing of the Armed Forces for a long time.¹⁸² Hence, one must consider these internal conditions and how they will influence the new Ukrainian Army.

Also, changes in the external environment are no less significant and important. A new geopolitical European landscape is forming around Ukraine. Dynamic changes in the international environment create new risks and threats to the national security of Ukraine. In addition, the new century will bring even more intensive developments in science and technology. These will beget a military art, doctrine, strategy, and structures

¹⁸⁰ *The Main Directions of Ukrainian Foreign Policy*, Resolution of the Verkhovna Rada 3360/XII, 07.02.1993, title III.4.b.1.

¹⁸¹ Stephen Larrabee, *Ukraine’s Place in Regional Security, Studies in the International Relations and Security Structure of a Newly Independent States*, Published 1998 by RAND, pp.255-260.

¹⁸² “Social and Economic Situation and Prospects of the Development of Ukraine,” The Ukrainian Center for Economic and Political Studies, Kiev, 04.1997, <http://www.uceps.com.ua/eng/research.html>

of the Armed Forces. Hence, these external factors in forming the model of the Armed Forces of the 21st century is no less important than the internal factors.

B. DEPENDENCE OF THE MODEL OF ARMY ON THE POLITICAL-MILITARY STATUS OF UKRAINE

The social-political conversions in Central and East Europe have resulted in cardinal geopolitical changes space in Europe. The first trend involved shaping a new European security system through its key components: NATO, (its basic element), the Organization for Security and Cooperation in Europe, the European Union, the Western European Union, and the Council of Europe.¹⁸³ This new system is distinct in that it pursues primarily political, economic and international legal means of ensuring the protection of the national interests and security of its members.

As a matter of fact, Russia's has opposed the endeavor of Central European nations to fill the security vacuum in their region by joining NATO, which will lead to a new enlargement of the NATO. Russia does not wish NATO to become a Pan-European security structure and does not wish to see NATO accept new members, especially those neighboring on Russia's western border. Russia's policy hopes to reestablish its position in East Europe, and to secure political, economic, and military prevalence in the former republics of the USSR.¹⁸⁴ In fact, the most urgent challenge of global and regional security becomes the tendency toward the renewal of bloc opposition. Therefore, Russia's most important demand of NATO has become a confession that Ukraine and the

¹⁸³ Stephen Larrabee, *Ukraine's Place in Regional Security. Studies in the International Relations and Security Structure of a Newly Independent States*, Published 1998 by RAND, pp.257-264.

¹⁸⁴ Floriana Fossato, "Russia: NATO Warned Against Expansion to Former Soviet Republics," *Radio Free Europe / Radio Liberty*, Inc, <http://www.rferl.org/nca/features/1997/05/F.RU.970523151533.html>

Baltic states are zones of vital interest to Russia.¹⁸⁵ Such a confession would mean that Russia's spheres of influence could eventually become a major problem for European security.

The danger of such a situation for Ukraine can be: that in peacetime it can become a "buffer zone," caught between two military blocs. In a war Ukraine can become a battleground.¹⁸⁶ For example, Russia and Belarus are already forming a joint regional force, creating common defense infrastructure, and developing a joint military doctrine.¹⁸⁷ These two threats can be removed with either annexation of Ukraine to NATO or joining Ukraine to the Tashkent Pact (the Collective Security Treaty),¹⁸⁸ or by Ukraine's assuming a neutral and non-bloc status. However, the relations of Ukraine with NATO are defined as "special" relations by the NATO-Ukraine Charter that opens extensive opportunities for capitalizing on common interests.¹⁸⁹ Either way, the existing national security prospects compel Ukraine to arrange its own defense, relying on its own Armed Forces.

¹⁸⁵ "Committee on Eastern Europe and Russia in NATO, the Push for Central Europe in NATO First, Bringing Eastern Europe and Russia into NATO," 1994, <http://www.fas.org/man/nato/ceern/beern00.htm>

¹⁸⁶ Vladimir Shariy, "Lessons for Ukraine, Conclusions From the Balkan Wars," The National Research Center of Military Technology and Security, <http://www.niss.gov.ua/cacds/magazine/art17.htm>

¹⁸⁷ Oleksiy Havrylenko, "Does Ukraine Need A New Military Doctrine?" *Zerkalo Nedeli*, No.23(244), 07.12.1999, <http://www.uceps.com.ua/eng/publications/zerkaloEnglish.html>

¹⁸⁸ Russia signed a deal with its five partners (Armenia, Belarus, Kazakstan, Kyrgyzstan, Russia and Tajikistan) in the Collective Security Treaty to guarantee the supply of weapons, but the agreement could also see the creation of a Central Asian version of NATO. The original Collective Security Treaty, which laid the foundation for the latest deal was signed in Tashkent in May 1992 and entered into force in 1994. It expired in 1999 and three founding members—Azerbaijan, Georgia and Uzbekistan—withdrawed at that time. (Borys Parakhonsky, "Central Asia: Geostrategic Survey, Central Asia and the Caucasus," Information and Analytical Center, <http://www.ca-c.org/dataeng/parakhonsk.shtml>)

¹⁸⁹ *NATO-Ukraine Charter*, The Bureau of European and Canadian Affairs, U.S. Department of State, 06.19.1997, http://www.state.gov/www/regions/eur/fs-nato_ukr_charter_970616.html

C. THE NEW THREATS TO THE NATIONAL SECURITY OF UKRAINE

The termination of the period of the Cold War was marked by a display of new calls for international safety. Basic among these were: the increased distribution of the technology of producing weapons of mass destruction and systems of their delivery, clandestine migration, and narcotic trafficking, political, and religious extremism. All and all, these factors have brought real threats to the national security of Ukraine. Beyond this, Ukraine heavily depends on the sources of energy, trade, technical resources and information science of neighboring countries, such as Russia. This gives these countries a military-technical advantage over Ukraine. Additionally, these countries can apply coercive pressure to dominate Ukraine politically, militarily or economically.¹⁹⁰ In fact, all these factors can, under certain conditions, present military threats. These new risks and challenges to Ukraine's national security places new demands on its Armed Forces. Therefore, these demands necessitate transforming the Ukrainian Armed Forces, and their doctrine and structure.

Under these circumstances, the Army of Ukraine faces a new challenge: preparing troops and command cadres for limited or local wars, because "limited wars, while not preferred, are a frequent occurrence."¹⁹¹ In fact, 10 to 15 years ago this problem existed neither in Ukraine nor in the former Soviet Union. The main threat laid in a possible confrontation between the two most powerful military-political blocs: NATO and the Warsaw Pact. Furthermore, at that time it was assumed that when troops were being prepared for large-scale operations, they were theoretically ready to conduct combat

¹⁹⁰ Viktor Zamyatin, "New Trails Await Ukrainian Neutrality. Moscow Forms Permanent Alert Army Group in the Southwestern Direction," *The Day*, <http://www.day.kiev.ua/DIGEST/2000/034/den-ukr/du8.htm> and Stephen Larrabee, "Ukraine's Place in Regional Security," *Studies in the International Relations and Security Structure of a Newly Independent States*, Published 1998 by RAND, pp.251-255.

¹⁹¹ F.G. Hoffman, *Decisive Force. The New American Way of War*, Westport, London, 1996, p.5.

actions in low-intensity conflicts. Today the situation has changed; there is a pressing need to be prepared for local wars. This fact constant impacts the evolution of military art, including the military doctrine and a structure of the Ukrainian Army.

In particular, the main features of any local armed conflict are its limited objectives, and scope, which mainly affects their territorial, economic, and political, interests, and the forces involved in the conflict. Local wars can occur in the form of border conflicts, military actions, armed incidents, and internal armed conflicts. A conflict that has affected a small part of a territory with a limited contingent of armed forces involved will be regarded as local.¹⁹² Therefore, for states, such as Ukraine, an armed conflict can be regarded as local if hostilities are confined to one strategic area. As a rule, a local armed conflict involves tactical and operational units of the Armed Forces without general mobilization. The basis of Ukraine's defense concept has already included a territorial principle of defense.¹⁹³ This structure for guiding for the Armed Forces and the entire defense system provides for self-sustained execution of tasks by each territorial command. Under this system, a commander of territorial troops can use the military, and civil resources of a territory to interact with the corresponding civilian leaders. Obviously, the critical issue of civil-military relations with all the problems inherent to the newly emerging Ukrainian democracy has appeared in the sphere of national security.¹⁹⁴

¹⁹² Vladimir Shariy, "Lessons for Ukraine, Conclusions From the Balkan Wars," The National Research Center of Military Technology and Security, <http://www.niss.gov.ua/cacds/magazine/art17.htm>

¹⁹³ *The State Program for the Ukrainian Armed Forces Development until 2005*, http://www.mil.gov.ua/eng/derg_prog/dpbr.htm

¹⁹⁴ Oleg Strekal, "Civil Control over the National Security Policy-Making Process in Ukraine," NATO Democratic Institutions Fellowship, Kiev, 1997, <http://www.nato.int/acad/fellow/95-97/strekal.pdf>

Concerning the nature of a low-intensity conflict, one should understand that a local armed conflict is a form of resolving national-ethnic, religious, political, territorial, and other non-fundamental disagreements by using armed forces both within a country and with respect to a neighboring state when it does not develop into what is known as "war." In accordance with FM 100-20 of the U.S. Army, a "low intensity conflict" is:

...A political-military confrontation between contending states or groups below conventional war and above the routine, peaceful competition among states. It frequently involves protracted struggles of competing principles and ideologies. Low intensity conflict ranges from subversion to the use of armed force. It is waged by a combination of means, employing political, economic, informational, and military instruments. Low intensity conflicts are often localized, generally in the Third World, but contain regional and global security implications.¹⁹⁵

In fact, owing to the geostrategic situation of Ukraine and to the fact that it lacks effective forces to conduct large-scale military operations, it can provide effective counteraction in a local armed conflict only with respect to neighboring states. Most of these states are either former USSR republics, which have close economic, social, and cultural links with Ukraine, or former allies under the Warsaw Pact. However, today evidence suggests that in the foreseeable future a local war or an armed conflict could hypothetically draw Ukraine into a regional war. This leads to the conclusion that the greatest danger for Ukraine at present is the threat of a local armed conflict.¹⁹⁶ Therefore, understanding the nature of local wars becomes essential, as does the evolution of arms, methods and forms of using armed force, which can serve as a basis for recommending organizational changes in the Armed Forces so they can execute their duties in armed conflicts of any scale.

¹⁹⁵ FM 100-20 / AFP 3-20, Headquarters Departments of the Army and Air Force, Washington, DC, 12.05.1990, <http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/100-20/toc.htm>

¹⁹⁶ Vladimir Shariy, "Lessons for Ukraine, Conclusions From the Balkan Wars," The National Research Center of Military Technology and Security, <http://www.niss.gov.ua/cacds/magazine/art17.htm>

The current state of the Ukraine's Armed Forces and of the possible problems on its borders show that in order to conduct successful operations in local armed conflicts in the foreseeable future, the Ukrainian Army will need to create independent operational groups of forces comprising different units under time constraints from several territorial commands, where combined arms units of the ground forces will play the key role.

Unfortunately, today the Armed Forces of Ukraine have an insufficient number of combat-ready rapidly deployable sub-units, units, or combined arms units deployed on the territory of territorial commands. Probably, these forces will not be in a position to perform their tasks and missions independently in local armed conflicts, and so from the very outbreak of a crisis, building up forces in the area of threat will be necessary. This can be done primarily with battle-ready combined arms units deployed on the territory of other territorial commands as well as by committing other troops of Ukraine's Military organization.¹⁹⁷

Moreover, an analysis of local armed conflicts, such as in Kosovo, shows that direct preparation of combat action is usually conducted within a brief time span and in an abridged form.¹⁹⁸ Should an armed conflict escalate, "green troops" ought to be prepared for combat action. However, the Armed Forces of Ukraine, which rely on conscription for their manpower acquisition and have mainly young, insufficiently

¹⁹⁷ The term was legislatively fixed in the National Security Concept of Ukraine: "Military organization of the state, including Ukraine's Armed Forces, Security Service, National Guard, Internal Troops, bodies and units of the Ministry of Interior, Border Troops, military units of the Ministry of Emergency, other military units established in accordance with Ukraine's Constitution, shall ensure the defense of Ukraine, protection of its sovereignty, territorial integrity and inviolability of its borders, counteract external and internal military threats, and fight organized crime; ensure protection of population in case of catastrophes, natural disasters, dangerous social conflicts, epidemics, etc." (Anatoliy Grytshenko, "Civil-Military Relations in Ukraine: On the Way From Form to Substance," NATO Fellowship Program, <http://www.uceps.com.ua/eng/publications.html>)

¹⁹⁸ Dennis Steele, "Kosovo—The Task Force Commander's Viewpoint," *Army Magazine*, <http://www.ausa.org/armyzine/craddocksept99.html>

trained conscripts, will require quite a long time for this. Therefore, having rapidly deployable medium-weight combat brigade-size units will provide the most decisive solutions for possible threats.

The understanding of general trends in modernizing of arms and equipment as well as methods of using them in local wars also provides a fresh impetus to the evolution of military affairs. It is important to stress the growing mobility of weapon systems and the depth and accuracy of their impact on targets. Furthermore, modern warfare is characterized by high dynamism and a broad scope. In order to maintain operational effectiveness and to minimize personnel losses from precision long-range weapons, it will be essential to disperse troops and at the same time to concentrate efforts in the direction of the main attack, which can be ensured by a timely maneuver of forces as a medium-weight.

As a matter of fact, modern warfare is characterized by a rapid change in one's efforts. The combat experience of the Gulf War in 1991 shows that troops armed with highly effective weapons will not break through the defense but will look for vulnerable spots or bypass fortified areas. Obviously, there will be no breakthrough of the prepared defense in the foreseeable future. Instead, superiority of troops will more likely be achieved through bypassing the prepared defense and will be ensured by a massing of fire and using new weapon systems. This is indeed the backbone of the Initial Brigade Combat Team's (IBCT) operational concept recently created in the U.S. Army.

In addition, one important trend resulting from upgrading weapon systems is the growing role and capabilities of command and control, intelligence, and the electronic warfare systems and the growing efficacy of combat support systems. As mentioned in

previous chapters, the U.S. Army command sees intelligence and electronic warfare activity as part of combat support activities. Soon these forces and assets could become a special element of tactical as well as operational formations. Already the capabilities of intelligence assets enable them promptly and efficiently to detect targets to the entire depth of enemy territory while command and control systems can allocate targets among weapon systems virtually in real time and electronic warfare systems can effectively disrupt enemy command and control systems as well as the state administration system.

In fact, the primary feature of modern warfare focused on developing command and control, intelligence, and the electronic warfare systems has already found its confirmation in the IBCT's operational concept of conducting a battle. Fortunately, Ukraine has already possessed the technological potential for producing high-level electronic warfare systems, such as reconnaissance and surveillance systems. What the Army of Ukraine does not have is the modern combat force structure. Therefore, the IBCT's structure and the system of training with reliance on deliberate dismounted assault by combined arms units possessing greater situational awareness through the use of reconnaissance sub-units, such as RSTA, will be advisable for Ukrainian combined arms brigades. In sum, some recommendations are presented that are essential for the further development of the Army of Ukraine.

- First, the ground forces should have combat-ready formations and units at a level sufficient to fight a local war. The basic principle of battling an enemy is inflicting maximum harm to the opponent while incurring minimal losses for one's own forces. In order to enhance the combat readiness and operational effectiveness of the troops, it is advisable, in

manpower acquisition, to shift to the contract basis and to the modern, mobile, deployable combat structure of the Army based on medium-weight brigade-size units.

- Second, headquarters and troops should be equally prepared for both local wars and large-scale wars. In personnel training, it is essential to give a higher priority to developing reconnaissance and intelligence gathering and terrain orientation skills, ensuring an effective use of all types of available weapon systems and enhancing survivability in combat.

D. EFFECT OF AN ECONOMIC SITUATION IN UKRAINE ON REFORMING ITS ARMED FORCES

It is axiomatic that the worse the army is equipped, the greater its size must be, which is overall true for Ukraine. In contrast, the Secretary of the National Security and Defense Council (NSDC) Yevhen Marchuk stated, "The Ukrainian fighting forces must be of a European type."¹⁹⁹ That idea comprised, in the first place, the best suitable army structure, its compatibility with the NATO's military structure, such as a high degree of rapid deployability, lethality, agility of an army's units along with appropriate civil control over the military and adequate funding. However, Ukraine's domestic economic problems make comparisons of the Ukrainian Army's with Western armies theoretical.²⁰⁰ In fact, Ukraine's economic crisis became the largest factor that fundamentally changed the situation of the Armed Forces of Ukraine. This crisis has resulted in a sharp reduction of the defense budget. Financial resources allocated from Ukraine's budget were

¹⁹⁹ Serhiy Zgurets, "Ukrainian Army to Move toward Europe: This Suits Both NATO and Kiev," *The Day*, <http://www.day.kiev.ua/DIGEST/2000/006/den-ukr/du10.htm>

²⁰⁰ Ibid., <http://www.day.kiev.ua/DIGEST/2000/006/den-ukr/du10.htm>

insufficient even to sustain its own Armed Forces. The figures cited below show that in 1997 through 1999 the Ukrainian government substantially curtailed funding of the military sector.

Year	1992	1993	1994	1995	1996	1997	1998	1999
Defense budget, % of GDP	2.40	1.57	1.46	1.80	1.90	1.35	1.35	1.40

Table 2. Provides the Funding of the Ukraine's Armed Forces During 1992—1999²⁰¹

This further complicated the situation, and the Ukraine's Ministry of Defense (MOD) could not afford to have full-scale military exercises from the division level, to purchase new weapons and to modernize current equipment sufficiently. Unfortunately, the FY-2000 created no basis for optimism either: the MOD could obtain as little as \$180-200 million. According to NATO standards, Ukraine should have spent \$5.5-7.5 billion a year on developing modern, currently-used weapons. This amount equals the country's entire annual budget.²⁰²

There is no economic grounds to expect any serious defense reform in Ukraine, unless the nation recovers its economy and accumulates a "critical mass" of people, that have the vision, courage, political will and support, capable of making tough choices in the defense sphere. Otherwise, the Government can only keep the Army at its minimal "survival" level, slightly reducing the personnel every year.²⁰³

²⁰¹ Anatoliy Grytshenko, "Civil-Military Relations in Ukraine: On the Way From Form to Substance," NATO Fellowship Program, <http://www.uceps.com.ua/eng/publications.html>

²⁰² Ibid., <http://www.uceps.com.ua/eng/publications.html>

²⁰³ Ibid., <http://www.uceps.com.ua/eng/publications.html>

Once there was a slogan in the Pentagon's Strategic Planning Department: "It is time to think—we are running out of money."²⁰⁴ Meanwhile their budget is a hundred times greater than Ukraine's military expenditures. Indeed, it would be nice if that American slogan became the main motto not only inside the Ministry of Defense but also for the executive as well as for the legislative branches of state power.

E. THE STATE PROGRAM OF THE UKRAINIAN ARMED FORCES REFORM AND DEVELOPMENT UNTIL 2005

The main goal of the State Program of the Ukrainian Armed Forces Reform and Development, which was approved by the National Defense and Security Council and adopted by Presidential Decree in 2000, is an establishment of a modern Armed Forces, which will be "optimum in strength, mobile, well equipped, supported and trained, capable of fulfilling their missions in any environment and at the same time not a burden on the country's budget."²⁰⁵ Based on the Armed Forces functions the state program details the Armed Forces missions as the following:

- Capable of dealing low intensity conflicts with peacetime force structure;
- Provide mobilization readiness for a local or regional war;
- Permanent readiness to participate in peacekeeping and humanitarian operations under the auspices of international organizations with a brigade-size force (up to 3,000 personnel).²⁰⁶

Under these circumstances, the state program envisions establishing of the following structures:

- Forward Defense Forces;
- Main Defense Forces;
- Strategic Reserve.

²⁰⁴ Oleksiy Havrylenko, "Does Ukraine Need a New Military Doctrine?" *Zerkalo Nedeli*, No.23(244), 07.12.1999, <http://www.uceps.com.ua/eng/publications/zerkaloEnglish.html>

²⁰⁵ *The State program of the Ukrainian Armed Forces Reform and Development until 2005*, http://www.mil.gov.ua/eng/derg_prog/dpr.htm

²⁰⁶ *Ibid.*, http://www.mil.gov.ua/eng/derg_prog/dpbr.htm

In fact, emphasis is given to the Forward Defense Forces that is the most mission-ready constituent of the Armed Forces designed for dealing with an armed conflict.

The Forward Defense Forces consists of:

- Strategic Conventional Deterrence Forces;
- Rapid Reaction Forces, which are considered to be the main element of the future Ukrainian Armed Forces, and Cover Troops.²⁰⁷

Providing that, the Ukraine's ground forces are the largest component of the Armed Forces and constitute the backbone of the Armed Forces. According to the state program,

The main purpose of the Ground Forces reform and development is the establishment of a Euro-Atlantic type of force, efficient, mission capable and equipped with state-of-the-art weapons and equipment, capable to qualitatively perform assigned missions. One of the ways to achieve this goal is to improve the Ground Forces formation and unit organization. The peculiarity of this process will be a shift from "division and unit" to "brigade and battalion" organization. This will enhance the mobility, independence, fire and strike force of formations and units.²⁰⁸

Moreover, this program emphasizes further optimization of the Armed Forces' strength by dealing not only with the strength reduction, but also with re-organizing and improving all organizational and functional elements. In particular, the four divisions of the ground forces will be reformed into detached mechanized brigades in order to modernize the Armed Forces. Obviously, their numerical strength will diminish, but battle-readiness and mobility will definitely increase as a result of artillery and air-defense facilities. Another fifth division will be adopting a brigade-based system with two—three brigades included.²⁰⁹ In general, the total strength of the Ukrainian Armed

²⁰⁷ Ibid., http://www.mil.gov.ua/eng/derg_prog/dpr.htm

²⁰⁸ Ibid., http://www.mil.gov.ua/eng/derg_prog/sv.htm

²⁰⁹ Serhiy Zgurets, "Modern, Mobile, Battleworthy and Affordable," *The Day*, <http://www.day.kiev.ua/DIGEST/2000/018/1-page/1p2.htm>

Forces by the end of 2005 will be 295,000 military personnel.²¹⁰ Overall, taking into account such structural transformations of the Armed Forces of Ukraine:

.... One of the key principles of the military reform in Ukraine should be based on the development of capabilities designed for the identification of threats and early containment of conflicts. Given the limited combat readiness of troops and low mobilization capabilities, priorities in the development of Ukraine's Armed Forces should include: an increase in the potential of military intelligence; development of rapid deployment forces capable of inflicting unacceptable losses on the enemy and thereby containing an escalation of aggression. A fully-fledged air mobile brigade, capable of fighting in border areas within 48 hours, would be more useful than a cumbersome Army corps short of resources.²¹¹

In sum, the priority of any function of the Armed Forces of Ukraine will depend on a degree of urgency of the corresponding threat. Today's world is marked by an increase in crisis situations, resulting in different types of military conflict. These conflicts are constantly influencing the development of international relations and create serious threats to states national security, including Ukraine. The latter cases have often developed from local, regional conflicts to those involving the participation of a coalition of states against one state. Such conflicts, which have occurred in Chechnya, Yugoslavia, Transnistria, Nagorniy Karabakh, touch national interests of Ukraine, in particular—loss of petroleum and gas supplies, arms and drugs smuggling, increase of refugees and so forth. Under modern conditions, any military conflict having the potential to develop into local, regional or full-scale wars makes the situation in neighboring regions explosive, and the world fragile. The extremely important geopolitical location of Ukraine does not permit the Ukrainian Armed Forces to disregard nearby events. The main demand to the

²¹⁰ Serhiy Zgurets, "Reform, Building, or Development? What We Lack Is Not Terms But Money," *The Day*, <http://www.day.kiev.ua/DIGEST/2000/007/1-page/1p5.htm>

²¹¹ Anatoliy Grytshenko, "Civil-Military Relations in Ukraine: On the Way From Form to Substance," NATO Fellowship Program, <http://www.uceps.com.ua/eng/publications.html>

new model of the Armed Forces of Ukraine will be its ability to neutralize threats and challenges, which took place during the last decade of 20th century and, probably, will tend to increase in the future. So long as such threats are multilateral and have a wide spectrum from the local to global, then the new model of the Armed Forces of Ukraine cannot be limited to any one function.

Furthermore, a primary feature from the experience of conducting contemporary armed conflicts and wars is a special role played by rapid reaction forces, which should be based on a new combat medium-weight brigade-size structure. As a matter of fact, this medium-weight brigade solution will allow the Army of Ukraine to begin the transformation process to a full spectrum force better able to deal with various types of military operations and to bring the Army of Ukraine to modern standards of Western armies where the U.S. Army plays the dominant role. Notably, the decision to transform a portion of the Ukrainian Army into medium-weight combat groups based on a brigade's structure appears compelling. The geo-strategic environment will likely call for the rapid deployment of high performance combined arms forces in any region of Ukraine and abroad as a part of peacekeeping/peacemaking forces. In many small-scale contingencies, medium-weight brigade-size units appear more versatile than pure mechanized infantry units. Additionally, there will be the need to have theater forces that have high firepower, operational agility, and a low logistics footprint. This provides medium-weight brigade-size units the capacity to operate effectively in a military environment under direct and indirect fire. These brigades are optimized to the real challenges of foreign as well as domestic dimensions of Ukraine's political circumstances. Indeed, a move toward the medium-weight aero-motorized concept would put the Army of Ukraine firmly on the

path toward a more operationally agile force of 21st century without calling for either technological or budgetary magic.

It is important for Ukraine to take advantage of the current situation when there is no urgent military threat. This time must be spent efficiently for achieving a broad consensus on the following issues: what Ukraine needs the Armed Forces for; how much would be enough to satisfy these requirements; what price tag is affordable for society today and in the future; what ought to be done in order to meet any credible threat when it indeed appears.²¹²

The Ukrainian Armed Forces today is in the process of transformation. As a result, on the one hand there should be heavy emphasis on research, model-building and theory. On the other hand, there are the practical realities of maintaining combat ready, trained forces with almost no funding and deteriorating equipment. Indeed, transforming the Army of Ukraine in order to be responsive to the diverse challenges of the 21st century will be a continuing challenge.

²¹² Ibid., <http://www.uceps.com.ua/eng/publications.html>

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IX. CONCLUSIONS

When answering questions that have been used to frame this thesis, one should remember that while periods of peace should be respected, peace is not a permanent condition in world affairs. Recent events suggest that the time and opportunity to prepare for future conflicts may not last as long as many had hoped a few years ago. Even small nations can no longer be prevented from building total war capacity—whether nuclear or conventional. What is worse, new technologies make it possible even for small groups of perpetrators to inflict ever more chaos and dangers for nations around the world. The termination of the Cold War was marked by new calls for international safety, threats which include the increased distribution of the technology of producing weapons of mass destruction and systems of their delivery, clandestine migration, and narcotic trafficking, political, and religious extremism. All together, these factors are capable, under certain conditions, to require military counter-measures for threats to the national security of the United States and to Ukraine as well.

The U.S. Army has undergone at least five major reorganizations since the end of World War II. As a matter of fact, all major armed conflicts of the Cold War era that determined the U.S. Army's reformations were outside of Europe. However, the essence of four major reorganizations was that the U.S. Army needed to develop a credible deterrent, reflecting America's concern with the defense of Western Europe, where it faced the prospect of being overwhelmed by the numerically superior Soviet Army. For several decades up to the Gulf War, the U.S. Army focused on rebuilding its forces and adjusting doctrine for conventional war, and for defending Western Europe against a

possible attack by the Warsaw Pact forces. The early 1990s brought significant changes to the world and the U.S. Army.

The collapse of the Soviet Union and the end of the Cold War presented threats that were more ambiguous and regionally focused. However, the U.S. Army remained configured according to its Cold War structure: either very heavy armored and mechanized units armed with large numbers of heavy tracked vehicles or very light infantry-type units that are primarily foot mobile. In fact, the improvements in tactical mobility came at the expense of strategic mobility. The U.S. Army became progressively heavier and more difficult to transport.

At the time of the Gulf War the U.S. strategy established exacting standards for the employment of military forces. Forces would only be employed where clear-cut objectives had been established. When military power was used, it would be applied with overwhelming force to ensure quick and decisive victory with minimum casualties. However, the Gulf War exposed several features of the U.S. Army's light-heavy force structure. The most significant among them was the absence of medium-weight force structure, which would be able to combine the excellent strategic mobility, rapid deployability of the light-infantry Divisions, and overwhelming operational mobility, lethality and survivability of the heavy-armored force. The experience reconfirmed that the U.S. Army had lacked the medium forces that combine a degree of mobility, firepower, and protection greater than the generally foot-mobile light forces, yet are less strategically and operationally cumbersome than the heavy-armored and mechanized units. Therefore, the medium-weight brigade-size units seem just the right size to combine arms (armor, infantry, artillery, engineers) due to new technological advantages,

which impose its lethality and survivability, while also overcoming the deployability shortfalls of the U.S. Army divisions. As a result, the objective of the U.S. Army transformation was erasing the distinction between heavy and light forces that would make light forces more lethal, survivable, and tactically mobile, and heavy forces more strategically deployable and agile with a reduced logistical footprint.

Regarding the issue of funding for the new transformation strategy of the U.S. Army, it would be interesting to recall what Marshall Tyrren, a French military leader in the court of King of France Lydovik the XIV, said when responding to a question about the most important elements of a war. He wisely responded, "Only three things are necessary: first—money; second—money; and third—money!" In fact, the success of the new transformation strategy connects with the budget issue, which involves the specific relationships between the Congress and for the U.S. Army. Therefore, the Congress by adopting the FY-2001 budget confirmed its strong support the U.S. Army's transformation strategy. In sum, the U.S. Army, with the strong support from the Congress and President G.W. Bush's administration, is willing to take advantage of the current favorable conditions for success:

- Relatively peaceful world events;
- Unrivalled economic prosperity;
- Overwhelming technological progress.

Overall, this thesis has confirmed that in order to become more deployable and maintain lethality, the U.S. Army has fielded a prototype medium-weight brigade-size force that will use off-the-shelf systems and initiate the development of concepts,

organizational design, and training for the future of the U.S. Army called "Objective Forces." Fortunately, the U.S. Army has time to deal with this issue.

Analyzing the necessity of the Ukrainian Army's reformation, which also focuses on moving from the current large division-based structure to a modern medium-weight brigade-size Army, this thesis highlighted the two-year experience of the U.S. Army Transformation Strategy. This experience should be studied and most likely will be a useful guide for reforming the Army of Ukraine. For this reason, there should be heavy emphasis on research, model-building and theory. On the other hand, there are the practical realities of maintaining combat readiness, trained forces with almost no funding and deteriorating equipment.

Therefore, in order to be successful in reforming, the Ukrainian Army must take a vigilant look at the two-year experience of the U.S. Army transformation. These elements include: a common strategy between the political and military leadership, a multi-stage approach through the entire process of the Army transformation, in particular, some key components from the organizational structure of the Initial Brigade Combat Team (IBCT), such as a Recon, Surveillance, and Target Acquisition Squadron (RSTA). As was confirmed during IDEX-2001,²¹³ the annual defense exhibition in Abu Dhabi, the United Arab Emirates, Ukraine already possesses the technological potential for producing high-level electronic warfare systems, such as reconnaissance and surveillance systems. What the Army of Ukraine does not have is a modern combat force structure.

²¹³ IDEX-2001: Established as the largest defense exhibition, consolidating the position of the IDEX series as the world-leading international defense event in the Gulf region and Middle East. Data can be achieved through a web-site: http://www.idex-2001.com/WebPages/about_idex/default.htm

In fact, the IBCT's structure and training provides an infantry-based force, which relies on a dismounted assault by the combined arms units who possess greater situational awareness through reconnaissance sub-units, such as RSTA. Therefore, this warfighting concept is advisable for Ukrainian combined-arms brigades, which recently started to transform from mechanized divisions.

Special attention should be given to the IBCT's Operational Concept crafted for military operations in urban terrain. It has the capability of extending those combat operations across the entire spectrum of conflict. All together, these elements will be useful for the future developing of the Ukrainian ground forces based on medium-weight brigade-size units.

One lesson from the U.S. Army's experience is crucial for the successful reforming of the Army of Ukraine. The Ukrainian military must adjust its policy to establish productive relationships with both executive and legislative branches of the government. Hence, the critical point of reforming the Army of Ukraine in the light of democratic transformations is the issue of civilian control over the military and the relationship between political and military leaders.

Concerning the funding issue, one should understand that, for Ukraine, the current and painful lack of funds should not simply undermine the natural tendency of its Army to develop itself. Moreover, the priority of any function of the Armed Forces of Ukraine will depend on the degree of urgency of the corresponding threat. So long as such threats are multilateral and have a wide spectrum from the local to global, then the new model of Armed Forces for Ukraine cannot be limited to any one function.

Furthermore, a primary feature from the experience of conducting contemporary armed conflicts and wars is a special role played by rapid reaction forces, which should be based on a new combat medium-weight brigade-size structure. Similarly to the U.S. Army, the Army of Ukraine is enjoying a period of peace in which it can transform itself into a new Army based on modern doctrine and force structure, where medium-weight brigades will be the key element, the "backbone" of the ground forces of Ukraine.

Above all, despite some large economic and technological differences between the U.S. Army and the Army of Ukraine and the system of conscription as well, a couple of recommendations that would be beneficial for the further development of the Ukraine's Army should be made:

- First, the ground forces should have combat-ready formations and units at a level sufficient to fight a local war. The basic principle of battle actions of such an armed force is inflicting maximum damage to the opponent while receiving minimal losses for one's own forces. In order to enhance the combat readiness and operational effectiveness of the troops, it is advisable, in manpower acquisition, to shift to the contract basis and to the modern, mobile, deployable combat structure of the Army based on medium-weight brigade-size units.
- Second, headquarters and troops should be equally prepared for both local war and large-scale war. In personnel training, it is essential to give a higher priority to developing reconnaissance and intelligence gathering and terrain orientation skills, ensuring an effective use of all types of available weapon systems and enhancing survivability in combat.

As a matter of fact, the medium-weight brigade solution will allow the Army of Ukraine to begin the transformation process to a full spectrum force better able to deal with various types of military operations and to bring the Army of Ukraine to the modern standards of Western armies where the U.S. Army plays the dominant role. Notably, the decision to transform a portion of the Ukrainian Army into medium-weight combat groups based on a brigade's structure appears compelling.

Finally, this is optimized to the real challenges of external as well as internal dimensions of Ukraine's political circumstances. Indeed, a move toward the medium-weight aero-mobile concept would put the Army of Ukraine firmly on the path toward a more operationally agile force of the 21st century without calling for either technological or budgetary magic. However, transforming the Army of Ukraine in order to be responsive to the diverse challenges of the 21st century will be a continuing challenge.

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